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DEMOCRACY IN EDUCATION

DEMOCRACY IN EDUCATION

A SOCIAL INTERPRETATION OF THE HISTORY OF EDUCATION

BY

JOSEPH KINMONT HART, PH.D.

Of the Department of Education, Reed College.

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TO

THE DEAR COMRADES

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PREFACE

EDUCATIONAL experiment and reconstruction no longer need an excuse; all that they need is illumination. This will come from a number of sources, one of which must be history. It is said that "history proves nothing," which may be true; it is certainly true that history leaves many things to disprove. And history does reveal many phases of the educational problem which must be made the subject of critical investigation. History digs up the problems and shows their roots grown deep in old soils.

But history has been too freely presented as mere transpiring of events; or, if any lessons are to be learned from history, those are usually along the line of the "vanity of human wishes." None the less, either from history or from the clear sky, we have become possessed of certain ideals, ideals which run counter to some of the assumptions of the past, and of certain traditional survivals of the past that still remain with us. The modern, Western world professes to have taken democracy as its *political* goal; certain of the peoples of this Western world profess to have taken it also as their *social* goal; and all of them, or nearly all, feel the profound urge of that same ideal as an *economic and industrial* goal.

Nowhere, however, has democracy been taken as the *educational* goal. It has been, indeed, professed in America; but it has never been professed seriously enough to cause us to transform our traditional and therefore autocratically-inspired educational instrumentalities into actual democratic institutions. History has not been interpreted as

offering comfort to our democratic aspirations. The fate of democracies has almost always been pictured in dismal colors. To be sure, history does not prove that democracy will be, or must be, successful; but history does show that human purposes have been powerful determinants of the long course of events, and democracy is now our human purpose.

The Great War has become the war for democracy. But while big guns may do valiant service for democracy again, as not infrequently in the past, it is of the very logic of democracy that it must some day be based upon intelligence and moral freedom, rather than upon force. Hence the ultimate problem of democracy becomes the problem of education. Two items become important, therefore. First, history must be so interpreted that the *actual gains* which democracy has made in the past, and the *lasting problems* which still face democracy, will stand out clearly in the consciousness of the democratic citizen, the one aspect of the subject for his cheer, the other to deepen his sense of responsibility. Second, education must be seen as something more than a school-room task, to be turned over to immaturity and impracticality for solution. The school must become an actually socialized institution, and education must find itself at home once more, as in the olden days, in the very life of the community.

This book attempts to interpret history and contemporary problems in education from this point of view. It is, of course, tentative and subject to continuous reinterpretation. It is over brief for such an inclusive aim; but a book in the democratic spirit must leave something to the imagination of the reader. The handling of materials will show a frank and avowed interest in the cause of democracy; just as every history shows some sort of interest in some sort of outcome.

I have had the help of innumerable friends and some books. I do not dare enumerate all the friends who have offered suggestions. I shall mention two who have given critical assistance: President Edward O. Sisson, of the University of Montana, and Mr. Clarence L. Clarke, of the University of Chicago, both colleagues of a former time. But neither of these is to be blamed for my errors, either of fact or of interpretation. My debt to Professor John Dewey is apparent on every page.

In general, this treatment is the result of nearly ten years of university teaching in the field of the history of education. The majority of the students of the history of education echo the remark of a superintendent of schools of one of our largest cities: "I don't see that the study of history has anything to contribute to the solution of our problems, however much it may have of interest in general." But my own excuse for this presentation may be illustrated by the statement of a former student who wrote in a paper, at the conclusion of the course in the history of education: "Up to the time that I took this course I felt it was the duty of a cultured individual to sit at the side of the road and watch the procession go by; now I want to get into the procession." At a time in the history of the world when the demand is upon us all that we "get into the procession," this book, with its plea for a larger interpretation of democracy in education, may find for itself a place in the illuminating of the task and in the inspiriting of the toil.

J. K. H.

Reed College,
Portland, Ore.
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PART I

THE HISTORIC BEGINNINGS OF EDUCATION

DEMOCRACY IN EDUCATION

CHAPTER I

THE MEANING OF HISTORY FOR EDUCATION

EDUCATION has been going on for a long time; our educational institutions, practices, and materials are the products of centuries of accumulation. We are the heirs of the ages, and we have inherited much, some of which has become unsatisfactory. We have copied from the past; we have used customs and traditions of the centuries; we have built substantial habits. But now we are looking for something more adequate to the task. America has been a land of inventiveness in the field of mechanics. Should not something of that inventive intelligence be available for use in the larger social and educational questions that confront us?

But this inventiveness should not work in ignorance of the past. If we are dissatisfied with some of the practices and ideals of the past, that is no reason for uncritically discarding all the past. The very possibility of successful inventiveness implies real acquaintance with what has gone before. If we are to be able to deal with our educational problems in a clear and intelligent manner, we must know something about how these problems have arisen; we must see the various ways in which the great past has been effective in producing the present. We must get a long

view of the general course of the world's experience. We must begin with:

The Beginnings of Human History.—We are being told that human history began in what is now called the "group life" of primitive peoples. All over the world in the past, and largely even to-day, we find such groups. They were, and are, people who live in very primitive fashion, without the tools that we have and use, and without the knowledge or broad experience which mark "civilized society." Some of these groups still live much like animals, in rude shelters, with little clothing, and with precarious provision for food. They "get along," except in the presence of severe crises, like the failure of all foods, or a fundamental change in their physical environment. As long as conditions remain fairly stable they live their simple life, and take little account of time; they are "adapted to their environment." Even in the midst of our more civilized social orders, we can find occasional communities which live in much the same fashion; they are probably cut off from the main lines of travel and communication, are touched but little by the "current of events," and have settled down to a quiet life of fixed custom and habit.

In the community or group that is truly primitive there comes to be an almost complete marking out of the lines within which the life of the member may go on. Certain activities are proper; others shade off through the rather questionable into the highly improper. These ways of looking at conduct have not, however, been deliberately set up; they are the products of generations of custom. "Whatever is customary" is moral; the immoral is seen in any failure to keep to the customary line of action. And custom comes to have all the sacredness of a religious rite. It is not proper for any one to question the authority of the group-customs or traditions; to do so would be evidence

of innate disloyalty. Custom is as much a part of the actual order of creation as are the mountains or the stars.

Now in such a group, whether ancient and primitive or modern and secluded, as long as the conditions of living remain fairly fixed, these social relationships (expressed in custom and habit) remain fairly rigid: children have certain definite duties to their parents and all older people; marriage takes place between individuals having certain definite relationships to each other, and according to a very rigid ritual; leaderships in work and war are regulated by custom; moral controls have definite modes of making themselves felt; and religious forms receive their full and regular share of the time and energy of the group. These practices and standards of loyalty, morality, industry, reverence, and obedience are the natural and rigid results of generations of subordination, selection, and survival; and they are found everywhere, in greater or less degree, among all primitive peoples. This whole range of custom and control has been given the expressive name of "Folkways," i.e., the ways of the folk.[1] This is a convenient term and it will be freely used throughout this book to cover this general type of social organization.

How Life Goes on Under the Folkways.—If, now, we are to catch a full view of the development of education from the primitive period to the present time, we must come to a more complete understanding of the nature of the common life under the control of the primitive folkways. We have seen that these folkways are not intentionally organized; they just "grow up." They dominate the activities of the group. Children are born into them and grow up subject to them. It has been common to think of the life of the primitive man as being free; but this is, in large part, a mistake. His life is freer than that of the modern man's

[1] Sumner, "Folkways."

in one respect: he is concerned with fewer kinds of activities. But, on the other hand, these fewer kinds of activities are regulated by custom and tradition until each becomes a complete ceremonial. The individual member of the group is allowed no freedom of initiative in the making of new modes of activity, or in the remaking of old modes, From birth to death he acts as custom commands, without thought as to the reasonableness of the act and without care as to the value of it. Habit is the essence of this control. Of choice there is almost nothing, and of discrimination, nothing at all.

All the common interests of life are found within the group, however, and under the regulation of the folkways. Some form of industry is found everywhere, and the modes of this industrial life, as well as the rewards, are controlled by ancient custom. Political organization, in the sense of group control, is here, and its decrees are of hoary ancestry and unquestioned authority. Some form of marriage and family life is recognized as proper; religious rituals and ceremonials give sanction to all proper activities; and, as we shall see, educational practices make sure that the social structure of to-day shall be perpetuated in the children of the group in their generation.

It is obvious that the authority of the folkways is definite and final. But it may not be so obvious that this authority is a great system into which the individual is born, which he is bound to accept without question, whose details he masters with difficulty, and which remains *external* to him, in the sense that he has had nothing to do with its development, that it does not express his own personal desires or impulses, and that he can do nothing to modify it. He takes it on from outside himself, he surrenders his own life to its control, and he helps to pass it on, unchanged, to the next generation. It must be noted, too, that the group

itself is not free; the present group is but a link in the chain of the generations, past, present, and to come. The folkways are the possession of the whole group,—the permanent group, not this present group. They are entrusted to this present group for its salvation. They must be preserved intact and transmitted to the next generation, for the very existence of the next generation will depend upon the faithfulness of this transmission.

It must not be thought, however, that all these distinctions and conditions are clearly in the minds of the members of the group. They are not. The primitive man lives, even as we do, in the midst of conditions and under the sway of regulations of which he is only dimly aware. The history of civilization is the story of how the race has slowly fought its way into some more complete understanding of its own aspirations and the conditions of their realization. We may picture primitive man as a being of almost incalculable possibilities standing on the levels of first achievements, satisfied with the mere beginnings of social development, totally ignorant of the larger world lying about him which the ages of science will discover,—which has become, indeed, commonplace to us of later generations. That first level of attainment seemed to the primitive man an all but complete world. There were, to be sure, some mysteries about him which aroused his fears and compelled his prayers. But, on the whole, it was *the world* to him. He had probably some ancient story of the origin of things: this world was *created,* and filled up (as a finished house is filled with furnishings) with the various objects of experience, plants and animals, man and his fixed institutions, the folkways and all social relationships. "Whatever is, is right." His security depends upon the permanence of his world and the finality of existing arrangements; and his authority is of the very nature of the

universe itself. This is the world of the primitive man; this his implicit philosophy.

The Significance of Crisis in the Primitive World.—We have noted that as long as the conditions of living remain stable these folkway organizations of society remain fixed and final. But the conditions of living do not remain stable for very long. Crises of various sorts arise. These crises are of three general sorts. First, there may come some fundamental change in the character of the physical environment. Earthquakes may make the land uninhabitable; volcanic eruptions may do likewise; climatic changes may destroy the food supplies; epidemics may destroy the populations. Such experiences have been common in the history of groups. In the second place, a crisis may be precipitated by conflicts between two groups, which would lower the food supplies and probably result in wars. In the third place, an unusual individual may arise within a group and break through the old conditions. But whether through the operation of physical changes in the environment, through the shock of warring social groups, or through the leadership of an unusual individual, crises do arise. They are more or less complete in their destructive results and in their opening of the way to new developments, either toward progress or toward regress; and they thus make possible what is called "history." Of course these crises are feared by primitive peoples; they are undesirable experiences. The savage is almost always what Professor James called "tender-minded." He wants security, freedom from uncertainty; he wants a world in which all questions have been answered, which taxes his mind in no unusual way, a world from which all change has been eliminated, into which eternal changelessness has come!

Now out of the folkways of this primitive world we may

trace all our modern institutions, our traditions of knowledge, our prejudices, our superstitions, and our general social attitudes. Those ways of organizing the common life impressed human experience with qualities that are held by some to be ineradicable, giving to "human nature" the quality of "unchangeableness." Such a theory probably goes too far; but it is certain that "human nature" has been so definitely "set" by those experiences that the most profoundly critical shocks are necessary at times to produce constructive impression in favor of new modes of activity. Thousands of years have been required for the task of breaking through the absolute certainties of the primitive world into the dawning freedom of modern science with its attitude of endless inquiry. The crises of history have slowly enabled the race to rise to the view that security may be less dependent upon "certainty" than upon the recognition of the endless round of change; and that progress depends upon escaping from "certainties" that are no longer true. These crises have many varied aspects in the social world; they may be economic, civic, hygienic, moral, or the like. But whatever the nature of their origin, they all represent *problems*, difficulties to be solved. The solution of problems implies the expression of a special kind of mental activity: critical intelligence. As we shall see in later sections, the most significant outcome of the experiences of crisis in human life has been the development of intelligence and the gradual building up of the intellectual attitude, as over against the attitude of habit and custom. History is, as we shall see, the story of the continuous movement of the race toward more effective folkway controls, on the one hand, with an occasional experience of crisis, involving the possible application of critical intelligence in the reconstruction of stable conditions of existence.

Extent of the Folkway World.—In the beginning all human society was under the dominance of these folkway controls. All peoples seem to have passed through the folkway stage. Many have risen slightly above this stage in the course of centuries, organizing their larger social attainments upon what we shall later call the "Oriental" level. Some groups have fallen more deeply into the folkway control, until their life has become almost wholly mechanical. Very few peoples have ever escaped from the folkways, taking the race as a whole. Geographically, whole continents seem still to be held in this sort of regimen. Psychologically, all children come up through this experience, for most families are still organized in the folkway fashion, and must ever be so organized, at least to some extent. Most neighborhoods are still largely primitive, feeling the pressures of old customs and traditions; small towns are likely to exhibit this level of development in some measure; city neighborhoods tend to become "provincial." There is a "fringe" in the mind of each of us that is largely traditional, firmly fixed in habit, as is bound to be the case; and there is a large mass of tradition, prejudice, custom, and intolerance in the background of our common social organization. All this may seem very disagreeable doctrine, but it is the story of humanity's beginnings, whether of the race or of the child; and so obvious is it that it was recognized by Aristotle as having fundamental meanings for the development of society. He calls attention to various phases of it. Perhaps the most significant comment he makes upon the fact is to the effect that the individual who otherwise than by mere accident is not a member of a social group is either a brute or a god; all human beings are members of groups.

Escaping from the Folkways.—The race did escape from these primitive folkways; that is historic fact. And the

long story of the struggles by which escape became possible, and by means of which new types of social organization have arisen, is the substance of our study. Here it is necessary to point out that escape from such authoritative control may mean two very different things. It may mean finding the larger freedom of a real world of intelligent living, or it may mean opportunity for the complete disintegration of individual and social living. Both these results have appeared in history. Yet there is no reaching the former result without running the risk of the latter. Freedom involves the chance to go wrong; a "going right" that is imposed from without is not freedom. And some ages have been like some individuals: they have struggled with uncertainties, having broken with their old customs and refusing to return to their former "certainties." Habit is strong upon us. Outside of habit lies the unknown, peopled with strange creatures, products of ignorance and fear. Yet at times we find ourselves compelled to go forward. Columbus, Luther, Galileo conquer their fears and dare the unknown. Impulse, energy, and initiative are strong within us under proper conditions, and we leave the old, we remake old institutions, we develop new programs, freedom, science, and democracy.

The first real escape from these old, primitive controls, as we shall see in detail later, took place in Greece. The Athenian Greeks were compelled by the conditions of their living to expand their folkways until these gave way under the strain. Confusion followed. The conservatives felt that the age was degenerate, lost to all reverence or control. And there were those, the Sophists, who took advantage of the conditions to make "confusion worse confounded." But always humanity seeks escape from confusion in the effort to reëstablish order. Out of this breaking down of the old authority and the effort to set

up new controls arose that most wonderful period in the history of the race, the Age of Pericles. But internal uncertainty was supplemented by external danger. Wars followed among the Greek states,—Sparta against Athens, Thebes against Sparta, Macedonia against Thebes,—until, under Alexander, there was peace for a moment. During periods of peace society has always tended to develop new folkways; but the age of Alexander was too brief for this, and there were too many diverse peoples to be coördinated. After Alexander, confusion again prevailed until the "coming of Rome." The Roman Empire introduced an age of organization, and Roman Law went far toward restoring a condition of universal order, with fixed modes of control. Indeed it may be said that, in some respects, this tendency went too far; for one of the results of it was that men came to feel that life had lost all its personal value and significance, being purely mechanical. Into this mechanical civilization came primitive Christianity, with its message of the value of the personal life and the "infinite worth of the human soul." A great conflict appeared between the old mechanical conception and this new personal and moral conception. But the threat of barbarian invasion from the North made organization necessary; and Christianity took form in the Church, an institution that grew to be closely modelled on the plan of the empire itself. This more complete organization of the forces of civilization helped to carry some of the old ideals and values through the ages of barbarism and confusion, and helped to make possible the gradual assimilation of the Germanic tribes to the old civilization of the South. For a thousand years Europe was engaged in this task of converting the barbarians of the northern woods into citizens of the social order. The result of this thousand years of effort is seen in what we may call "medievalism," a great

world order, worked out in theory and largely also in practice, inculcated into the habit of the people and made to appear as the final statement of the nature of the world and human life. This "medievalism" was, in effect, a new and larger "folkway," fitted to the conditions of this new age.

But such a complete statement of the world is possible, just as the primitive folkways are possible, only so long as the conditions of living remain practically stable. Toward the end of the Middle Ages the world of physical existence was made over. New continents were discovered, new outlets for human energy found. Finally a new universe, the Copernican, took the place of the old universe, the Ptolemaic; and "medievalism" disintegrated before the eyes of its defenders. Men's interests shifted from "final" things to more personal experiences in society and nature. Reformation purged religion of some of its older absolutism; autocracy found itself challenged by the new political motives of democracy; authority began to break down under the challenge of criticism and science; and old social castes began to disappear as serfs became free workers in the growing industrial revolution. The Modern Age came in, the age of inquiry and science, of freedom and democracy, of uncertainty and courage. We are in the midst of that age, not at its end. We are beset with its problems, not born into final folkways. We are developing the tools of understanding, not learning old answers.

Yet we tend all too easily either to fall back upon the past, and thus practically to bury ourselves once more in old folkway conditions, or else we deny all value to the past, and by sweeping away all its meanings we destroy ourselves on the bleak plains of ignorance. "History proves nothing," except how history has been made. The student of education needs to know human history, not primarily for

the sake of facts as facts, but for the sake of the light thus thrown upon the great problems of civilization that still confront us and the processes involved in the solution of those problems,—which is the problem of education. The folkways know only the kind of education which is implicit in all custom-controlled, unthinking, unprogressive groups. The present must know a different kind of education. The intervening centuries have witnessed many experiments, many failures, and many advances. These are the serious meanings of the study of history, meanings not to be denied.

The story of these experiments, these failures, and these advances forms the main trail of this study. This trail does not follow a straight line through history, for the race has not known whither it was going, and experiment implies error and wandering and failure. Nor has this educational interest been isolated from other lines of human development. Human life is largely unified, and all lines of interest are interrelated and interwoven. The history of education is the story of the progress of the race in its search for new adjustments of its social life in the presence of changes in the natural and social environment. These adjustments, in so far as they have significance for us, have introduced new intellectual elements into the experience of the race. There has been a gradual accumulation of these intellectual treasures, in the way of the sciences, the arts, and the philosophies. In the very midst of these accumulations of experiences and their statement in intellectual terms, there has gradually developed, also, the *theory of development,* the theory of the process of development, the philosophy of development. That is to say, we are not only becoming aware, as the folkways were not, of the *fact* that civilization changes; we are coming to an understanding of the *methods* of those changes, until we seem

in a fair way to an actual mastery of those conditions and their ultimate control. At any rate, the history of education, which begins in the common, customary unintelligence of the primitive world, shows enough development of understanding and mastery of the conditions of developing experience to point hopefully to the coming of a day of actual intelligence, of science and control, of freed humanity and democracy; not, indeed, as final terms in a finished process, but as the moving ideal in the continuous struggle of humanity, an ideal not lightly won or held, easily lost, kept for the inspiration of the largely-remaining task only by the exercise of that "eternal vigilance" which is the price not alone of liberty but of all our other common democratic aspirations.

We turn now to the discussion of the actual processes of education in the primitive folkways, and then, breaking through their binding customs, we follow the trail until we come out upon the present, into the very midst of our social and educational problems, with the expectation that these studies will give us a clearer perspective as to the nature of those problems, and, therefore, real help in their solution.[1]

[1] Bibliographical materials for further reading or study along these lines are noted in the appendix.

CHAPTER II

THE METHODS OF EDUCATION IN THE WORLD OF THE FOLKWAYS

If, now, we have come to have some understanding of the nature of the first organization of society under these folkway-bonds, we are in a position to undertake a study of the ways in which education went on in that group life. It is important that we should see these things rather clearly, because all our human progress has come out of these old conditions and because very much of that old folkway life still clings to us. We have not yet escaped fully into a life of organized intelligence; we are still largely dominated by old folkway traditions and customs. We move slowly out and up from those lowly beginnings. Education is the most effective help in this long process. And if we are to understand the problem of education in the present, and that means the problem of civilization in the present, we must see how education began in the customs and habits of the primitive world, and then follow its essential windings and struggles into the complicated situation of to-day. The present is largely the accumulation of the folkways and folkway-changes of the past. If we are ever to escape from mere custom, mere folkway, into a life intelligently organized, we must learn the meaning of and the persistence of habit and custom in individual and social living.

The Race Educated by its Experiences.—If we look quietly through the long story of history, we shall certainly see that the race has gradually developed its present accumulations of inventions, institutions, and knowledge. These were not all in existence in its primitive period.

Sometimes history seems to be presented from the opposite point of view, as if, indeed, all these things were in existence (probably under cover somewhere), waiting to be found. Rather it would seem that men have developed the knowledge that we now have through long centuries of bitter experience. Inventions have come out of great necessities, at least in some measure; and institutions have grown and changed through the agonies of revolution and rebellion. The life of the race has not been easy. The race has been gradually educated by its experience. Hardship, suffering, poverty, famine, pestilence,—these are common aspects of the primitive world; but all experience educates by building up habit more rigidly or breaking it down. Victory and defeat, error and truth, mistakes and failures, certainties and fears, guesses, doubts and hopes, hatreds, animosities and wars, prosperity and adversity, the simple, the terrible, and the sublime in nature,—in short, all the ordinary and extraordinary experiences of the peoples of the earth have in their time modified culture and made the world move on. And out of these accumulating experiences, which have come to all sorts of groups and peoples everywhere, the race has gradually built up its folkways, its institutions; it has organized its inventions; it has accumulated its knowledge.

Occasionally great leaders have appeared,—prophets, poets, builders of empire, saviors of the people; and these have had extraordinary influence upon their times. They have helped to make life larger and better; but usually, also, they have helped to make the world of custom more rigid, for there have been few men in the history of the race who were big enough to put the good of humanity above their own fame or power. Around them have gathered new customs and traditions,—or some new institution has grown up to bear their name and to bind men more

completely to some old folkway type of living. This has been especially true in the field of religion, as witness the effect of the life and work of Mahomet and many others, East and West. Usually such leaders either pose as being "supernatural," or around their memories, after their death, the legend of "divinity" grows up; and this makes all they did the more sacred, the more binding upon the race; also a certain permanence is secured for their traditions. Still, from age to age, even these leaders are eclipsed, and the folk-experience grows and human nature comes to fuller understanding of itself, realizing new meanings and taking upon itself new obligations and responsibilities.

Under the control of these old folkway customs men are, for the most part, the mere playthings or victims of experience, suffering "the slings and arrows of outrageous fortune" with a sort of blind faith that the next world will make up for the evils suffered in this. The folkways are the world for them; what happens in the folkways is necessary; there are no means of understanding that men might escape from such conditions into a larger sort of world. But as we go on we shall see how, under pressure of events, men come to search out experiences, to determine whether they are really neccssary. For example, there was a time (not very remote, even now) when it was assumed that such an experience as typhoid fever was inevitable, one of the things that, if it came, had to come. But now only the most primitive mind accepts that view; typhoid fever is not inevitable and it is gradually being eliminated from the earth. So the "inevitable" ceases to exist for us; but it was of the very essence of experience in the folkways.

It is a long way from the fixed life of the primitive world to the gradually controlled world of to-day. It represents the gains of the ages; it represents the painful emergence

of the power to think; it means that men have determined to give up being the victims of experience, and have begun to feel the assurance that life can be made intelligent and subject to reason. That is the long story of science, the education of the race which runs in ever-widening current down through history to the present. We are to follow along its shores, from its beginnings in old stagnate pools of custom and tradition. It may be we shall catch some glimpse of the great ocean toward which its course seems tending.

The Earliest Forms of Education.—We must examine a little more closely just how the group is educated under the folkways. We are so accustomed to the thought that education is something that goes on in school-rooms that we may be surprised to find no school, in our sense of that word, among primitive groups. We may even decide that in that case there was no education there. But that would be a profound mistake, just as it would be a mistake to assume that children to-day have had no education before they start to school, or that the summer vacation has no educational significance. Indeed there is some reason for believing that the most effective education, that is to say, the education that most effectively modifies character and conduct, is that which comes to children in unconscious and unintentional ways, such as in play and other forms of activity. At any rate, a very definite educational effect was secured in the primitive folkway life through these out-of-school types of activity. We must look a little more closely at them.

The general statement of these educational activities is as follows: the children of the group must grow up to become the men and women of the group, if the group is to continue to exist. And the children of the group do thus grow up, and they do learn how to perform the customary work-

activities of the adult life by participating directly in them as children, and especially by playing at them. The play-life of childhood becomes the work-life of the adult years. The children live out in play what the adults are performing as work. The life of the group goes on, and the future life of the group is provided for. The children imitate, they are absorbed into the common activities; they share the group activities as far as possible actually, and they go beyond present possibilities by means of play and imitation. They even share the group excitements and emotions in the presence of dangers; they hear the tales of war and adventure and they relive those tales in imagination; they see the effects of hardship, danger, or death; they share in the celebrations of victory; they are thrilled by the stories that returning hunters or warriors tell when the group is gathered around the common fire after the work of the day is done. These primitive children live in the very midst of this group life. Its industry, its politics, its morality, its religion, its social demands wrap them round about from infancy, molding their growth and becoming their education. Thus their education is not of books, or schools; it is not bookish and remote from life; it is not intellectual and academic. It is immediately useful, easily understood, valuable in the life of the group. It is social, because it initiates the child into the group life and need; it is moral, because it helps the child to identify his individual self with the world-interest; it is civic, for it prepares the child for the responsibilities of the adult world; and it is thoroughly religious, for it helps the child to enter into that ideal life of the group which is over and above the merely sordid concerns of the day.

The Aims of This Folkway Education.—The deepest aim of this education is, of course, the perpetuation of the group. In this regard the individual does not count.

What he may want or desire is not considered; the life of the group is the only important fact, even for the individual. Among the Esquimaux, when food supplies are low and some must be sacrificed to save the group, the old men and women must go. The group alone is worth while, and the old men and women have ceased to be useful. Among other primitive peoples whose security depends upon their strength in war, for example, the ancient Spartans, imperfectly formed children are exposed to death. The group alone is worth while, and in such a group a crippled child will be a drag upon the energies of the strong.

These primitive groups usually live within fairly narrow areas, and their customs and habits become adapted to natural conditions that are fairly constant and stable. Long ages may pass for such a group, until their activities become as certain as the rising and setting of the sun. Their industries have very definite routine; their social organization develops fixed modes of habit; certain individuals exercise authority; certain gods are worshipped in definite forms of ritual; and custom determines just what is, and what is not, moral. These modes of life have not been deliberately thought out. They have just grown up; they have survived because they have protected the life of the group. In the long struggles for existence which every group has undergone some groups have perished because they could not thus find proper adaptation; others have survived because they did find how to adapt themselves to the conditions. But this success was probably not largely intelligent. It was a happy accident in the main, and later experience has made it a fixed fact. But the success has been that of the *group*. The individual, left to himself, would perish. The group must be cherished, even for the sake of the individual. Group custom, there-

fore, must dominate individual impulse; group habits must be ingrained in individual action until the life of the group is assured from all conflict with individual will. *The group must live,* and all that interferes with this primary fact must be thrown out. To this the individual must consent in order that he himself may have life at all. In fact, in this primitive social order the individual scarcely may be said to exist; he gets his whole significance from the existence of the group. Without the group he would not be able to exist or to signify. The long story of education is the story of the gradual emergence of the individual as having significance in his own life and right.

The Content of This Folkway Education.—Education, then, goes on in such a folkway world in the midst of and by means of these common elemental factors of life. There is no school in our sense of the term, i.e., there is no learning of lessons of an abstract and remote nature out of books written in other groups and remote from the common experiences of the learner. Learning here goes on in the midst of actual living, and is made up of the elements of actual life. It is *industrial.* Every group must have some means of subsistence, and the children share in these practical activities from the first; they learn to do the things that practical necessity demands. It is *social.* It helps to perpetuate the life of the group by making the children share in the sense of group-welfare, and by making real those social values that are implicitly prized by the group. It is never merely theoretical, in our sense of that word, but always infuses its activities with the feeling of reality of the group existence. Yet behind all these practical activities there is a sort of dim or shadowy *animus,* motive, or philosophy, which may not be wholly ignored.

In addition to the common activities of work and play which the children share, there is a wealth of story, tradi-

tion, legend, myth, the accumulation of ages of hunting and warfare,—hardships endured, work planned and executed or defeated, adventures with beasts and spirits, plottings of the enemy, religious tales and ceremonials, and all the experiences of the common feast. All these enter into the material of education. The interests of the children are controlled, of course, by these interests of adult life. Their attentions, i.e., the avenues of their growth, are held by the folkways, the machinery of adult life; by the work, the ceremonials, the adventures of the adult life, and the demands of the elders of the group. They are getting ready to be *elders* themselves; that is to say, their education is completely vocational.

The Entrance into Membership in the Adult Life.—We have seen that the individual is subordinated to the group, and that all the common processes of experience tend to impress the child with the reality of this super-individual life. But individual impulse is very erratic and unaccountable; and the life of the group is so very important that it would probably not be safe to rest the future of the group entirely upon the accumulated experiences of childhood alone without further guarantees. Somehow the children must be made to feel the sacredness of their trust; the future of the group must become to them as sacred as their own individual lives. Rather, the future of the group must *become* their own future life and being. Hence these folkway values must be more intimately their own than even years of habit would seem to make them; they must be identified with their own very lives through some deep and unforgetable emotional experience. The children, especially the boys, must take these customs upon themselves as their own real life; they must *internalize* them; they must identify their own dawning social impulses with them. Their hopes for activity and enterprise must become one

with the activities and enterprises of their group. They must eliminate from their lives all else and cleave only to these, until their very souls declare: "These customs are my life; these people are my people. I am of them; their enemies are my enemies, their friends my friends, their tasks my tasks, their evils my evils, their gods my gods." The folkways must be made to "set in," until all possibility of individuality is lost in these social necessities of his group. Then can the youth take his place in the councils of the elders as a trusted man, his education complete, himself now one of them, knowing absolutely nothing but the accepted principles and purposes of the group. How is all this accomplished?

In our modern society initiation ceremonies are rather common, but they belong to small organizations; they are not the activities of the civic group as a whole. In the primitive folkway, on the other hand, the child's education was completed by some large public ceremonial in most cases. He was put through a more or less elaborate initiation ceremonial, of which the elders of the tribe were the directors and in which the secrets of the tribe were revealed to him in such ways as to produce profound and lasting impressions upon him. These ceremonials were not deliberately worked out; they gradually accumulated out of old practices and were kept up through many generations because they helped to keep the group together. They helped the group to survive in the struggle for existence. The method usually employed was to give the youth a period of fasting, even of suffering, which would induce dreams and visions. In these visions spirits would appear to him, from among which, perhaps, a Guardian Spirit might be revealed; sometimes his Totem was selected in these experiences. All this was made as impressive as possible by being staged in some lonely hut in the solitude of

the woods. Then, when he had been thus profoundly stirred and while his emotions were still vivid, the secrets of the group were revealed to him, and with weird, fantastic music and action he was actually caught up into the very feeling of the elders. In some cases torture of the flesh helped to impress this moment upon him as the supreme experience of life. At any rate, the experience became profoundly impressive and the average youth never recovered from it; he was "swallowed up in the group." He was accepted by the group; he accepted the group; and from that time forward the life of the group was safe with him. He would die rather than see the group suffer harm; and he will see to it that the future copies as exactly as possible the past that has been revealed to him.

It should be noted that this initiation experience has broad social significance. It initiates the youth into the industrial order of the group; henceforth he has a definite part to perform in the economic struggle. It gives him also his civic place, his position in the political order. He finds by this means his social standing, and above all it is for him a great religious confirmation. All these things taken together make up the educational experience, and this ceremony represents the completion of childhood and the beginning of manhood. His education is over; his work has begun. In the modern world mere fragments of this old experience are all that remain of it. Actual "initiation ceremonies" now belong almost wholly to particular organizations, usually of a secret sort; the whole community now no longer initiates its youth into the community life. It allows him to find his way as best he can. He "gets a job," but the community is fairly careless as to the fact. He "comes of age" and begins to vote, but little attention is given the fact. He may put on the clothes of adult life and "enter society," but that is his own private affair.

He may be "converted" and join some religious sect, but that has very little social meaning in the old folkway sense. If he should go to school, especially to high school, and come to graduation time, the community as a whole would come out to rejoice with him at commencement time. This event comes nearest representing the old community interest in the future of the youth. But, on the other hand, this graduation experience is, perhaps, the most barren of social significance. It means little in the way of assurance of industrial position; it has no particular civic result; it does not mean a religious outlook; but it may have some value in opening the doors into "society." In the folkway world this initiation experience was all of these things. It was a unitary, highly emotional, deeply impressive experience, under the control of the wise men of the group and opening the way of the youth into all the life of the group, thus making sure that the group life would be safeguarded in coming generations. With us it has been broken up into fragments, each of which is profoundly important and interesting to the individual, but the community does not see them in their broad social meaning, and the youth as surely misses their inclusive social significance.

Values and Limitations of this Folkway Education.—The values of this primitive education are very real. It is, as we have seen, social, civic, vocational, moral up to the levels of the moral life of the group, and it is completed in a great emotional experience. Education of this sort is the highest concern of the community, for it assures the life of the community. It becomes, also, the chief vocation of childhood, not consciously so, perhaps, but in a very real sense. The children find their real life in this gradual emergence into the full life of the adult. The youth enters into its deepest experiences because he thereby identifies

himself with all that seems high and good to him. He realizes the biggest things in his imagination; he completes his own life in this complete life of his little world. It is a narrow world no doubt, but a complete world, and it is all that he has any means of knowing or desiring.

Over against these very real values we must note some lasting limitations. Folkways grow up under rather rigid conditions of living. The group is adapted to these conditions. As long as those conditions remain rigid the group remains fixed in its customs; the folkways become as rigid as is the bed of a river along the mountain side. This fixed life instinctively resists all encroachments from without, and all insidious tendencies toward change, if any arise, from within. Its industries become rigid, its social forms arbitrary, its morality purely customary, its religion wholly formal. And, back of this practical rigidity of the common life, there slowly emerges a sort of corresponding metaphysical rigidity, a kind of common philosophy which assumes that this *folkway* world is *the real world.* The world was created just this way, including these customs and traditions, and everything is just as it should be. "Whatever is, is right." It is the common, universal, human story. A level of living has been worked out which fits in with the conditions of the environment. This level becomes rigidly organized, rounded out, satisfactory. It ceases to change perceptibly; it forgets all past changes; it denies all change; it is become complete habit organized into a changeless environment, if such a thing can be.

The innermost characteristic, therefore, of this folkway education is its rigid certainty. It is habit, custom, tradition, in supreme measure; and these rest upon the implicit belief that the physical world is as unchangeable as are these folkways. Quiet, security, certainty—these are the

things longed for in the folkways. Here is realized the reality of an old falsehood: "Happy is the land that has no history!"

But the history of education will carry us far out and away from these certainties and finalities, through the problems and the uncertainties of the historic movements down to the present day. We shall see innovation take the place of habit here and there, invention take the place of custom, and science strive to overcome tradition. We shall see the conception of evolution gradually overturn the old folkway beliefs in the fixed and rigid order of the world, until we come to our own age with its problems, its tasks, and its tremendous hopes. Over against the education that is certain of itself, with its knowledge that must not be questioned and its emotional impressions that deliver the soul of youth into the keeping of the past, will arise the educational problem of to-day: "How can education go on at all in a world that is so little sure of itself, so uncertain, so restless, as is this modern world?" It will become obvious that the educational programs of that folkway world will scarcely meet the needs of the restless, uncertain present. Yet it may also become clear that there is still so much of the old folkway temper in this modern world that we cannot wholly cut ourselves off from the attempt to understand that past.

Before, however, we take up the long thread of the story of that historic struggle by which the world has escaped, in some measure, from the folkways into a new sort of world-organization, we must turn aside for a moment to see how these old folkways can become still more completely rigid as the framework of a somewhat different order of society. We must look into the nature of the Oriental type of civilization and education. This will help us to appreciate more fully the fundamental problem of this folkway

life: How may the race escape from the folkways into a more intelligent and broader world-life without at the same time losing the unquestionable goods that were developed in the folkway age?

We turn to a consideration of the Oriental type of folkways.

CHAPTER III

EDUCATION IN THE MORE COMPLEX FOLKWAYS OF THE ORIENTAL WORLD

We have called the general organization of society in the primitive world by the general name of the Folkways, and we have seen how these folkway customs and traditions control the education of the young among primitive groups. We must now see that in general, in all these very primitive groups, these customs and traditions are all unwritten, unrecorded; they live in the memories of the elders, in the rituals and ceremonials of the group, in the suggestion of sacred objects, and in the habits of the age. Written language has not yet arisen. Hence all these traditions are subject to the imperceptible changes that surely occur in even the most rigid world, variations which come about in the process of transmission from one generation to the next. Primitive men pride themselves upon the exactness of their memories, but usually they have no means of checking up their recitals, save by the memory of some other individual. More serious variations will occur through changes in the meanings of words that come because of modifications in the conditions of living. Of course these changes are usually unnoticed, and a suggestion that they were occurring would be resented by all loyal members of the group.

Now these changes lead in two possible directions. The one, which though exceedingly interesting must not detain us here, leads toward a more narrowly physical and accordingly a more narrowly social existence, as the condi-

tions of living become more and more precarious for any particular group. Group degeneration is not an unknown phenomenon. But our path leads elsewhere.

The Rise to the So-called Oriental Level of Culture.—The other direction which may result from these unconscious changes in the primitive folkways is that toward a more inclusive and extensive organization of the social world. In the more fertile valleys, like the Nile and the Euphrates or on the great plains of India and China, populations gradually increase until group presses upon group in very uncomfortable fashion, demanding some actual revolution in the organization of life. This is history. Wars are the first solution of the problem: the elimination of the weaker group. In the primitive world weakness is almost a crime. But the desolations of war pall even upon the savage, and not infrequently he takes refuge in some sort of a "treaty" or inter-group understanding. This means, of course, that his old group isolation is broken down, that his group becomes part of a larger organization similar to a "nation" or federation of groups. Such a "nation" occupies, of course, a much larger territory than the old group knew, a territory too large to be known by every member of the "nation." The total population of this new federation may also be too large to be known individually by every member. Hence, in this larger social organization there are at least two conditions not present in the older, smaller group: a habitat not fully known, and a membership not personally acquainted as a whole. Yet it is important that within this larger "nation" something of an actual community of life should be felt. To be sure, the existence of the old customs and traditions of each particular group stands in the way of this complete fusion, for most of these old folkways will run on in the same old ways, even though something of their rigidity and sacred-

ness has been lost through these wider contacts. Men do not give up their customs as soon as they find out they are not final; habit is too strong for such an outcome. The task of imposing, or developing, a common life involves great difficulties. But social pressures have produced such results. Something of a common life appears, the "nation" really arises, and on one stage of its development it presents the characteristics of the Oriental world.

Development of the New Folkways.—In such a "nation" there are, as we have just seen, accumulations of old group-customs. These probably have some relationship to each other, as the very fact that these groups have come together shows that there was some underlying likeness of custom or tradition. Still they must all be harmonized. Traditions must be adjusted to each other so as not to jar too greatly on neighboring groups; industrial, civic, and religious activities must be reorganized to fit into these larger conditions of living. There are thus many possibilities of conflict. Now conflict has three possible outcomes: it may end in war, in which case the "nation" is disrupted; it may lead to *thinking,* a very unlikely outcome and one which only one nation, as we shall see, ever really adopted; or it may lead to a sort of slurring over of the more flagrant differences, permitting the development of a sort of common life in which each group keeps the most sacred parts of its old traditions, unwittingly surrendering much they earlier held quite sacred. Of course many wars of a minor sort may arise, and there may be some rudimentary thinking, but the outcome has usually been a sort of mutual adjustment of a practical sort in which much is forgotten on all sides.

Now in the midst of this larger organization of these old, lesser groups there must emerge some sort of actual embodiment of this growing unity. This new common life

must be bound together by means of communication of some sort, demanding a common language. It must be made to conform to certain common standards of loyalty, demanding tests of "patriotism"; and usually it must find a common motive of religious emotion, demanding tests of "orthodoxy." But a language that is to be common to groups of people who are not personally acquainted and who vary greatly in experience must become a written language; and a test of loyalty that is to bind all such diverse types together must be selected out of whatever is common in the total experience of the several groups and must be given some fairly permanent form, i.e., it must be written down; while the common motive to religious expression must have the reality of the old folkway traditions, i.e., it must be material selected out of the varied folkways of these varied groups.

That is to say, these very social developments both imply and demand the invention of written language, the organization of specialized government, and the appearance of a literature that shall preserve the standards and vitalities of the old folkways in written form. Of course these old traditions, coming from many sources, will be contradictory, even in describing what is obviously a common experience of separate groups. This will involve criticism of the traditions, "harmonizing," and various forms of accommodation. But eventually a sort of common literature will have appeared, bringing conventional standards of culture which will be binding upon all the people of all the groups. The folkways have been made over to suit the needs of this larger group, they have been written down in unmistakable form, and standards of "orthodoxy" have begun to appear. These new inventions have bound the world in a more rigid system than the old. Old China is an excellent illustration of this outcome.

Education under these Oriental Folkways.—The task of education in such an enlarged social world will obviously be different from that which we have been studying in the preceding section. The world in which this larger "nation" lives is too extensive to be known by all the people from first-hand experience. The member of such a group cannot know his world in a *perceptual* way, i.e., by merely keeping his eyes and ears open. If he comes to know it at all, it must be in a *conceptual* way, i.e., by getting the experiences of other men and trying to understand what they mean. This calls for a new type of understanding, the understanding of something you have not personally experienced. It is illustrated by books. We read of things we have never experienced and try to discover what those things would mean to us. It is like the lessons in school. We study things that seem unreal, but the books tell us they exist. Hence we try to understand. And these wider folkways are just of that sort. They find their proper statement in the literature that has grown up; they bring to the children much unfamiliar material which must be committed to memory. Just because they are wider in their range of materials, they must be much more rigid in their methods of learning; and since they cannot be fully understood, they must be the more implicitly obeyed in a purely literal way. They will thus become universal rules of conduct, binding upon all members of the "nation" and adapted to the varied conditions of life. But they will be taught by a special class of "teachers," the accepted and authorized interpreters, who will declare the meaning in disputed cases. They will become the laws of the country, the "common law," standards of conduct, or of manners, or of taste. They will be useful in the courts as standards of loyalty or patriotism, in religious affairs as standards of "orthodoxy," and in the schools, for now there will, of course, be

schools, they will be useful in an intellectual way as a means of grading the intellectual abilities of the people. The task of learning will be very hard, and few will attain to mastery. The rest will be graded by the distance they are able to travel on the road to mastery.

These written customs and traditions will become more or less sacred, to be literally followed. This literalness will give rise to vexatious questions of interpretation. But the master-intellects will become the official interpreters, and they will slowly extend the bearings of these writings until the time may come when every practicable detail of life will have become subject to minute definition, with a rule prescribed in the sacred or near-sacred writings. The educated man will be the man who knows the literature of these recorded folkways, and, as in old Judea, it will be said of the common man, "Cursed is the man who knows not the Law."

But it must not forgotten that all this is but folkway, the accumulated folkways of the various groups out of all their various pasts. There is no intelligent *theory* of life in it, no conscious program, no real science. These are but accumulated "rules of thumb" which, since they have never been subjected to vital criticism, have gradually hardened into these fixed routines which reduce all life to a round of stated observances. The range of life may be wider than under the old oral customs of the little group, the scope of life may be a little broader, but the significance of life is just as definite and unchangeable as in that older order. There is here no free intellectual life to criticise custom by means of ideals or to rescue practice from the domain of habit. Authority, written in the books and made sacred by hoary tradition, controls all the vital concerns of life.

The School.—Since this Oriental type of society is too

extended and too complex to be "taken on" by the average individual in the common processes of experience, the process of education requires a new piece of machinery. The school comes into existence. This means that written books are studied, a special class of teachers develops, lessons are set, hours are spent in study, other hours in recitation, examinations are passed or failed—the whole series of events so well known in our modern world goes on. The best illustration of this is seen in the old Chinese system, where its full artificiality and remoteness from actual life appear. Here the school inculcated the tradition, the teacher was the real statesman, and the scholar the upholder of the permanent folkways. The method was memorizing and repetition. Fixed forms of expression were practiced until they became utterly automatic, and the mind was slowly tortured into complete conformity with the ancient patterns. But few could go far in such a system. The children were scattered all along the years, only a few remaining to the very end, to justify the ways of institutions to the coming generations. The old-time school represents the climax of ingenuity in setting up the conditions of intellectual "struggle for existence" in which many are called but few chosen.

Dominant Influences.—The influences of custom dominate all activities on this Oriental level; and this really means the influences of religion. In many instances, perhaps in most, such a nation conceives itself as a "chosen people," a "central kingdom," or something of the sort. Custom and religion support the doctrine "Whatever is, is right," and economic and political institutions in turn support religion and custom. The past is sacred; the present and the future must "copy fair the past." In this way these larger folkways become merely blind alleys, lanes with no outlet, into which countless millions of the peoples

of the earth have wandered. There is no real hope in these folkways, for they reach an inflexible limit of growth along all lines. Nothing but some profound shock,—such as has recently come to China,—the shock of some great, progressive civilization, can shake them loose from their fixed ways and give them the vision of a new social order.

The failure of such social organizations lies in this: they developed many "rules of thumb" of admirable value, but they merely *accumulated* them. They never developed the power to criticise them, to reorganize them, to make the new a means of escape from the old. That is to say, they never developed a *theory* of society by means of which to criticise their old practices. Hence they had no possible means of criticising their accumulations of ideas and systems. They became the victims of this mere accumulation of rules and systems, like some old householder whose attic is filled with all sorts of ancient, unusable implements and tools. Progress consists not merely in getting more implements; it consists in throwing away some of the old ones. But this must be done not at random, but with actual regard to the uses of the tools that are kept. This involves a type of critical intelligence not common in the world and practically unknown in the folkway stages of experience.

Education among the Hebrews.—Concrete illustration of this Oriental type of education may be found in many nations, both modern and ancient. But in the further course of this discussion we shall come upon certain great contributions from the Hebrew people, and the Hebrews offer an excellent example of this level of development. Hence we shall use this nation for a little further study of this type of folkway. Variations may be found in Babylon, India, China, Egypt, and Persia; but these will largely be variations in detail and not in essential principle.

The Hebrews began as a number of tribes in the deserts of Arabia. Various types of pressure forced them gradually into a sort of federation, the Twelve Tribes of Israel, by means of which they learned a sort of community of life. Legends of a common ancestor helped them in this, and the story of an inheritance which had been lost, but which they were to find again, the "promised land," also helped. Yet, despite these helps and these pressures, they never became a complete nation. For a few years, under David and Solomon, there was a minimum of internal strife. But this was merely a truce. Immediately after Solomon the effort broke down and the "nation" broke into two groups, the Ten Tribes of Israel and the Two Tribes of Judah. Two centuries later the larger of the two was swept out from the currents of history, becoming the mysterious Lost Tribes of Israel. Judah, of the two tribes, alone remained.

The traditions, or folkways, of these original twelve tribes were preserved in the writings of the remaining groups. Judah as a "nation" survived Israel a century and a quarter, finally falling before the destructive forces of westward-moving empire. In the years of the "Captivity" they sat down by the waters of Babylon and "remembered Jerusalem." These memories turned to their heroic past, to the legends, traditions, and endeavors of their old national life. And when they returned to their old homes to live, those old legends and traditions became for them the sacred direction for life. They were written down in Law and Prophet and Saying of the Wise. The extreme experiences of captivity and return made all their past sacred. "If I forget thee, O Jerusalem, may my right hand forget her cunning, may my tongue cleave to the roof of my mouth." The remnant that returned became extreme literalists. Their efforts to follow the Law, that is,

the written Folkways, are at once the most sublime and the most pathetic exhibition of blind moral heroism in the history of the human race. For five hundred years after the return from captivity lawyers, priests, scribes, and rabbis were busy organizing, editing, and interpreting these materials of the old traditions. Each new item thus established bound the people just so much more rigidly within the shackles of Law; yet every possible bit of such material was worked over, and if there was any probable basis for deciding that it was authoritative, it was included within the accepted sacred writings and the people submitted to the added burden. Of course there were those who could not understand these interminable details, but they were held in contempt by the learned doctors of the law who spent their time in thus binding "burdens heavy to be borne on the backs of the people."

The training of the young under this system was, of course, formal, narrow, and hostile to progress, foreign to the modes of science, and inimical to the development of truth. But the constant terror of national extinction produced even from these formidable materials a wonderful moral idealism, a deep and lasting purpose which has renewed itself in the life of the Jews through two thousand years of wandering on the face of the earth and made of them a "peculiar people," indeed.

Why did not the Hebrews Escape from their Folkways? —There was a time in the days just preceding and following the Captivity when, under the leadership of the prophet Jeremiah, the Jews came near to reaching the level of individual and critical understanding which would have meant freedom from the old traditions. Jeremiah did, indeed, declare that the authority of the old folkways had come to an end [1] and that the day of a new sort of social

[1] Jeremiah, Ch. 31; vv. 31–34.

understanding and control was at hand; but the people never understood this statement and their further development was not in the direction of greater intellectual freedom and broader social organization. Instead, they sank more completely into the folkway attitude and developed all the bonds of complete subjection to the past. They surrendered all their life and hope and purpose to the control of a literal custom and tradition; their further education took, not the direction of science and freedom, but of authority and habit. Why?

Two reasons may be given. First, the movement out of the folkways, up through the mazes of experience into the first glimpses of intellectual freedom and onward into the organization of a moral life under the control of intelligence, is a very long process, as we shall see later in the case of the Greeks. And for the Hebrews the time for this was all too short. They were approaching this outcome slowly in the period from Isaiah to Jeremiah; but the complete overthrow and destruction of the nation by Babylonia ended that possibility. The time was too short to accomplish a result so stupendous.

The second reason may be found in the words of a Hebrew poet of the Captivity period: "By the Rivers of Babylon we sat down and wept." When the people found themselves forcibly expatriated they expended their energies, not in intellectualizing their situation, but in weeping about it. They gave themselves up to a very natural emotional overflow; weeping absorbed the energies that might have gone into thinking. There is some evidence that their minds had played fitfully around the vague conception of a world-order freed from the bald control of mere tradition and historic custom and organized and controlled by intelligence, but there is little evidence that they ever took the notion seriously or gave more than a passing thought

to it. That is to say, though the Hebrew life was rich in ideas and ideals, though the nation produced poets, prophets, sages, and religious leaders in profusion, yet never in the period of its national existence did it produce a critical philosopher, an organized psychology, or logic,—the tools of social reconstruction,—without which escape from the folkways seems impossible. Judaism produced no Socrates, or Plato, or Aristotle.

To be sure, in later ages, after the Jews had come into contact with the stimulating intellectual life of Europe, they produced a number of eminent critical philosophers. But in the days of their more isolated national life they expressed their energies in emotion and aspiration, not in the working out of a more fundamental critical basis upon which they might reorganize their disintegrating social order. With intellects disciplined to the limits of precision by their strenuous education in the minute details of the law, they had become incapable of vital intellectual action in the presence of the great new problems that arose in their national and social crises. They stood by their old folkways to the end, in sublime faith, and saw their national existence dissolve before their eyes. They "strained at the gnats" in their old traditions, and while thus engaged they were destroyed by forces that lay outside their understanding, forces against which they could only pray and hope, but about which they had never learned to think.

We shall meet one large current from this old life at a later stage in our study. Meanwhile we must turn to another people and see how, through bravely facing the conditions of existence, they won escape and freedom from their own folkways and opened the door of freedom to the whole world.

PART II

THE WAY OUT OF THE FOLKWAYS

CHAPTER IV

EDUCATION IN THE FOLKWAYS OF THE OLDER ATHENIAN WORLD

We have already noted three aspects of the folkway life of early peoples: the primitive life of fixed habit; the tendency toward degeneration of habit and custom; and the movements by which a more extensive social organization and a more complete folkway system are realized on the Oriental level. If these were all the tendencies possible to humanity, the history of education were already ended. But Man has one more chance: he may hope to escape altogether from this primitive folkway type of living. How one nation made this escape we must now see. The history of education beyond the folkway levels always begins with Greece. Greece is the first nation in the world's history to escape from this folkway domination. All the "progress" of the world comes through this "escape" of the Greeks from the fixed conditions of life. For this reason it has been said that "except the blind forces of nature, nothing moves in this world which is not Greek in its origin."

The Folkways of Old Greece.—We have already seen that all customs and habits change imperceptibly. But among certain peoples customs and habits change very rapidly, yet without ever plunging the people into the ultimate questions of philosophy or social theory. The old Greek life emerges out of the shadows of the Homeric world with a certain fixedness of form: monarchic, aristocratic,

to some extent militaristic. The history of Greece for the centuries between Homer and the Persian Wars is a story of the very gradual development of democratic institutions. On the basis of the slavery of the many the comparatively few Greek citizens developed a remarkable degree of individual participation in the conduct of affairs.

Beginning with the clan life of the earliest period we find the gradual development of larger groups, the "phratry" or brotherhood of the clans, and the tribe with its tribal territories and its tribal city, and finally, out of many struggles, the federated tribes with their central state-city, the "city-state" of Greek history.

Out of these developments came two (to mention no others) rather distinctive types of social organization and life: Sparta and Athens. Sparta was located in a fertile valley and peopled by a military race, warlike, aristocratic, ruling over a native slave population of tillers of the soil. Always fearful of her slaves or her neighbors, Sparta never escaped from the dominance of the aristocratic and militaristic parties. Her education was just such as we have seen under the primitive folkways: a long and severe training for the purpose of destroying every weakness and every fear, for Sparta must have soldiers. Sparta was a fortified military training establishment. She used the whole of her common life to promote her education for military service.

Athens, on the other hand, was located near the sea. Her people were sea-going, enterprising, commercial, democratic in instinct, artistic in their spirit, and progressive in mood. They early turned their attention from warlike conquests to commercial interests. Hence they lost their militaristic tendencies and with them their monarchic and aristocratic institutions. Athenian life was never dominated by military interests. In the same way, though the

Athenian people were always religious, they never permitted the priest to become the dominant influence in their moral and civic, or even in their religious life. Athens thus escaped the two great barriers to freedom and development: Militarism and Ecclesiasticism. These tendencies toward democracy, industry, commercial extension, and freedom continued with characteristic struggles, but with real progress, until the Persian Wars in the fifth century, B.C.

Education among the Earlier Greeks.—Spartan education, as we have noted, tended to develop the traditional and characteristic qualities of the soldier. We shall not describe it here. A good account of it can be found in Plutarch's *Life of Lycurgus.* It is mentioned here again for the purpose of pointing out the fact that Sparta's education never rose above the folkway level; it never became intelligent. This is proved by this fact. After hundreds of years of constant training in military tactics Sparta continued to use the same old systems of organization and attack; so that when in the fourth century Sparta and Thebes fought for Grecian supremacy, Sparta was overwhelmingly defeated because the Thebans, under Epaminondas, used new and, from the folkway point of view, unfair methods of arranging their forces and strange, unheard-of methods of attack which the Spartans were utterly unable to withstand. So intelligence overthrew fixed habit. As long as all groups are on the same folkway level victory must go to the superior physical force. Sparta was incapable of rising above this level. Thebes rose above it, and Sparta fell before superior intelligence.

Athens, on the other hand, also had her older forms of education. Athens was the most completely human community of the ancient world. The primitive folkways of the Athenians were almost as definite as those of the Spar-

tans. But the Athenians were restless, wanderers on the earth, learners of new things. Hence their folkways were constantly subject to the influences of change, influences too slight to produce great crises, but important enough and constant enough to determine movement and development. Still the education of the young was fixed in rather narrow grooves. It was not public, as in Sparta, but it was subject to the closest supervision by the proper public magistrates. The results must measure up to certain public standards. This education could be given in the homes, but for the most part it was given in certain institutional ways where the children from several homes came together. The *palaestra* was a sort of playground-gymnasium where physical exercises were taught, and the *didascaleum* was a sort of music school where playing upon instruments and reading and writing were taught.

There was some writing in the sand with sticks, and later upon wax tablets with a stylus, and finally, when the students were advanced sufficiently, upon parchment with pen and ink. There was learning and copying of texts and verses from the poets, singing and expressing the poems, and interpretation of the poetry studied. The effort, rather unconsciously undertaken, seems to have been to help the boy to come to know the life he was beginning to share, the life of the city in which his life was to be spent. The "pedagogue" of old Athenian education was a mature man, though a slave, whose task it was to lead the boy through the streets of the city, not merely to and from the playground. The moral and civic significance of this is very great. There was no school, even in old Athens, as we think of school, a place apart from the actual life of the city where abstract, even irrelevant lessons are studied out of books that not even the teacher can fully understand. No. Education in old Athens retained most of the

genuineness and immediateness of the older folkway results. When a boy finished his years of training and experience in playground, gymnasium, and music school, and his explorations of the city under the guidance of the pedagogue, he was prepared to enter into the activities of the adult members of the social world. He was ready to understand the "Oath of Allegiance" that he took; he was ready to stand up before the citizens of Athens and take this vow:

"I will never disgrace these sacred arms nor desert my companions in the ranks. I will fight for temples and public property, both alone and with many. I will transmit my fatherland, not only not less, but greater and better, than it was transmitted to me. I will obey the magistrates who may at any time be in power. I will observe both the existing laws and those which the people may unanimously hereafter make, and if any person seek to annul the laws or to set them at naught, will do my best to prevent him and will defend them alone and with many. I will honor the religion of my fathers. And I call to witness Agraulos, Enyalios, Ares, Zeus, Thallo, and Auxo and Hegemone." [1]

Educational Theory in Old Greece.—It is necessary to insist that this Old Greek Education was still essentially of the folkway type. It was not intelligently developed; there was no elaborate theory underlying it. It had grown up and developed out of old customary practices, and it was of the nature of "rule of thumb." This is shown by the naïveté of even such a writer as Thucydides who, though he belongs to an age later than the end of the Old Greek period (but before Euclid), still does not know simple mathematical principles. There was, indeed, no social theory in this earlier period. There was the beginning of a primitive speculation, but it was the "philosophy" of physical nature. Human knowledge began as far as pos-

[1] For explanation of these gods see Monroe: "Source Book," p. 33.

sible from man himself. Philosophy began in speculations about the heavens and the structure and nature of the world. It was in a later period that "Socrates brought philosophy down from heaven to dwell among men." The utter lack of conscious theory of either social organization or education is shown in the later period when, old customs and institutions having become outgrown and uninhabitable, the people are completely at a loss as to which way to turn. Life can go on under the folkways without conscious theory, since practice and habit are fixed and no questions are permitted. But when customs and habits fail, when old practices become empty if not ridiculous and social life faces the chaos of systems destroyed and institutions broken down, what shall society do without some theory of the right social order, or at least some theory of the right way to go about the reconstruction of order?

Social life demands order, system, institution; we are lost without these. But social life also demands growth, change, development; we die without these. Social order developed into fixed institutions can do without *theories* of social order, for habits and customs work best when theory is absent. But when, inevitably, habits and customs break down and social organization has, for a season, a chance to grow into new forms, then *social theory* is indispensable if the social order is to be saved from destruction. We must now follow the course of events in which the old Athenian folkways broke down under the shocks of conflict. We must see the years of chaos and confusion, the strenuous efforts to restore social organization on the basis of new social theorizings, the failure to accomplish this result through overwhelming pressures from outside, and the bequeathing to the world at large of the tragic experience of the Greeks, out of which have come all our world-developments in politics, science, philosophy, and education.

CHAPTER V

THE BREAKDOWN OF THE ATHENIAN FOLKWAYS

We have already seen three general and obvious aspects of the folkway world: the life of stagnate habit, the possibility of degeneration toward a more completely physical existence, and the rise of a more extensive world on the Oriental level. But, as we have seen, no one of these, nor all of them together, holds any real promise for the growth of civilization and the development of culture. We find the first genuine promise of such advance in the Athenian world. Athens gave to the world the first suggestion of the possibility of a social order, not of the folkway type, in which intelligence should play a real part. Here we find the first real break with the primitive folkways. We must now discover the elements released in this breakdown of the primitive life of custom and habit.

Human conduct, both social and individual, seems to express itself in three main modes.[1] The first of these we have already discussed, the mode of Habit and Custom. Custom is the social structure, habit the individual expression and acceptation of custom. When the long-accumulating customs of the group have become the full possession of the individual, he has become completely habituated. Habit, custom, folkway, all stand for certainty, for the mechanical, the fixed, the satisfactory, the final in conduct. They represent the group and individual achievement crystallized to date. The group is a complete structure, the individual a walking bundle of habit. The latter does not

[1] See Introduction in Thomas' "Source Book for Social Origins."

think; his thinking has all been done for him and it is presupposed in his possession of habits. He lives by his social and personal habits, by the customs and traditions of the group, not by anything that can rightly be called "intelligence."

The second of these social modes is Crisis. We have already seen how habit changes by imperceptible degrees under the slow pressures of changing environmental conditions. It has been hinted, also, that more severe changes are possible; that such severe conditions might arise as to compel radical readjustments in the structure of the group in its habits and customs. Such a severe crisis would mean the breakdown, more or less complete, of the folkways, the failure of customary adjustments, uncertainty, chance for innovations, for development and growth. It would mean the rise of whatever intelligence the group latently possessed, for it would raise the problems of actual social order, problems requiring analysis, experiment, invention, if the group were capable of these things. At any rate, it would mean a complete break from the certainties of the folkway world into the uncertainties of chaos or of intellectual struggle, for it must be remembered that habit is the certain aspect of experience, intelligence the uncertain.

What could produce such crises? There are three general sources of this experience. First, some change in the natural environment—climatic changes, earthquakes, volcanic eruptions, failures of food supplies, epidemics, and the like; whatever tends to destroy the fixed world within which accustomed habits have been depended upon. Second, some change in the social world—pressures of population that are overwhelming, migrations of new peoples into the range of the group, devastating wars, and the like. Third, the rise within the group of some extraordinary,

unexplainable, and non-conforming individual, a natural leader who breaks through the old ways and organizes new ones by the sheer force of his native energies. Any one of these three types of crises is likely to come to any people at any time.

What shall be done by a group in the presence of such a complete crisis? Mr. Huxley has pointed out the three courses open to the animal whose life has been profoundly disturbed by environmental changes. It may perish; it may migrate; it may reconstruct its modes of life to meet the new conditions. These same possibilities confront the group whose folkways have been broken down. It may disintegrate and perish, socially at least; it may move to a new habitat where it can reëstablish its old modes of living; it may face the new situation, the new conditions, and make its life over in such radical degree as will make possible its continuance in the old location. But this last solution may compel the development of analytic intelligence.

This brings us to the third mode: Reconstruction, readjustment to changed internal or external conditions of group life. This involves the conscious and intelligent construction of new habits to meet the new conditions, invention of new social customs and attitudes, attention to elements of experience and conditions hitherto unnoticed, analysis of these conditions and elements, and development of a new world of practice, emotion, and either explicit or implicit philosophy. In short, it brings us to the necessity of the development of *theory*.

Let us note its significance a little more fully. Crisis in the folkways precipitates the problems of reconstruction. This means the search for the theory, probably hitherto unconsciously held, that underlay the old habits and customs, the determination as to whether that old theory will suffice for the new structure of life, the uncovering of the

various elements of practice, feeling, and attitude that have held together and supported the old habits and customs, the invention of new attitudes, methods, and even aims for the readjustment of the world of action, finding new bonds to take the place of old customs, and the actual working out of the new conditions under which constructive action can go on, effort can accomplish things, and life itself can seem worth while.

All this means that the effort toward reconstruction is an effort to get back into a world of certainty wherein control is assured, i.e., back into a new sort of folkway. The history of the race is thus seen to be a series of struggles, that swing from one level of habit through crises and reconstructions to new levels of habit. But on the new levels, if these have been won by real struggle, the life of the race is richer, a little more intelligent, a little more worth while. Out of all these steps upward, these complications of folkway, crisis, and reconstruction of new folkway, slowly emerge the new worlds of action, emotion, and civilization, with the enlarging understandings of experience, with the increased powers and controls that go with these larger worlds. Intelligence develops; knowledge grows and accumulates; resources, physical, moral, and spiritual, are discovered and explored. Life is enriched, refined, and defined. Abuses appear, become sacred through custom, are criticised by the liberated, and are eliminated peacefully or through the shocks of war. But out of it all a larger life emerges and human nature takes on new qualities and finds its higher good in new directions.

The Crisis in Athens.—This first developed in the actual experiences of the world in the life of the Athenian Greeks. Athens in the days preceding the Persian conflicts was a world grown very complete through long development, while at the same time there existed an undercurrent of

unrest, foretelling the possibility of some decisive social crisis. The long struggles in Athens for the development of democratic government had largely undermined the respect for old customs and traditions that still held Sparta bound fast to the past. The rise of such expressions of the national life as lyric poetry, as against the epic, showed the stirrings deep within of the individual spirit. The growth of a critical philosophy of the physical universe, while it had not yet directly touched the problems of the social life, had undermined the older traditional foundations of the universe, the mythical stories of creations, etc., and had laid the basis for the eventual undermining of the social world as well. The growth of knowledge of nature and society had reached the explosion-point; all that was needed was the fire, or the shock, to set it off.

Then came the tremendous impact of the two great world-orders of that time: Persia against Greece, the Oriental civilization against the Occidental; the East against the new West. After two thousand years of conflict such impacts are still in our own day profoundly influential of change. What must this first great conflict have meant to Greece? It actually meant the complete breakdown of her primitive folkways. This was the climax of several hundred years of general tendency. It came to its inevitable conclusion in Athens. It liberated the minds of the people from the lingering controls of old customs and traditions; it brought on the first great disillusionment of the human mind. "Our folkways are not *the* way of living; they are simply *a* way, and who can tell whether they are better than some *other* way?"

The breakdown of folkway institutions means the breakdown of personal and individual habit, the release of energies that may run riot, even to destruction, the loosening of all the common bonds of established social order, and

the emergence of the feeling of individual freedom, even license. "This is now a free country and I can do as I please." This is especially the way in which such an experience is likely to come to the young. On the part of the older members of the group, especially the civic and moral leaders, such a breakdown brings the fear of social disintegration, of anarchy and decay. That is to say, such an experience releases emotions, feelings, attitudes of mind, hopes and fears and the like, most or all of which are new in the group life.

But this means that such crises bring about conditions under which the mind actually grows. Under fixed habit and custom mental life does not properly exist. As we have seen, the folkway is a mechanism. But in the social crisis the social mechanism has broken down, and intelligence must appear if the group is to be saved from destruction. Old traditions still persist, but they are denied by new conditions or ignored by the newly released individual energies. Problems are everywhere. What shall the outcome be? Shall it be actual destruction of the group, disintegration of the group into so many atoms of unrestrained individualism, the recapture of the group by some old folkway resurgent, or the swinging of the group, through the emergence of intelligence, up to some new level of organized living? The future must answer these questions. Athenian intelligence faced them squarely.

The Crisis as an Educational Problem.—Plato represents this critical social and educational situation very clearly in the dialogue called "Euthydemus." In the old days fathers had little or no difficulty about the careers of their sons; such questions were settled by the customs of the folkways. But in the troublous times of the crisis Crito voices the insistent difficulty. Old types of education have broken down. In their places have come "those

who pretend to teach others," but these new teachers all seem to be "such outrageous beings" that in despair Crito comes to Socrates. His question is the most fundamental question of the age: "I have often told you, Socrates, that I am in constant difficulty about my two sons. What am I to do with them?"

This is more than the question of one father in his dealing with two sons. It is the question of one generation dealing with the future of the nation. "I am in constant uncertainty about the whole future of Athens. What shall we do about it?" And the question is fundamental. The folkways are gone; the individual stands forth unrestrained, undisciplined, ignorant of life, contemptuous of old controls. This is a new power in human life, this individual, the most precious power ever uncovered. But it is likewise a new danger. Will he destroy the works of the centuries? If so, will he at the same time destroy himself? The world's hope may rest in him; but has the past no value? And is his own value in his undisciplined strength, or will he find a truer value when he shall have learned how to use the past in making his own energies more accurate, more definite, more sure? These are the questions of the future. Humanity finds itself rather suddenly released from the traditional and customary bondage of the centuries. It must try itself out in this new freedom. What is human nature? That must be investigated, its remote characteristics explored, its larger significance determined. What is physical nature? This, too, must be searched out. It will take years, ages. Indeed, after two thousand years we are just getting fairly started on this mighty adventure.

But in the meantime actual problems confront the citizen of Athens. The world is in chaos. What shall the citizen, the lover of his city, do? All sorts of men will appear

in the course of this larger history, including men who will be able to live in the midst of social chaos without much awareness of the events transpiring about them. But this experience of Athens is new in the history of the race. The ages to come may work out many answers for just such problems, many suggestions for periods of unrest. But in this first period of confusion an immediate answer of some sort is needed. Who can supply it?

Even at this early date not one answer alone, but five at least were offered, not all at once, but within the next century. Two of them came immediately, the other three in later years. These five proposed solutions of this crucial situation in the life of Athens represent a wide range of responses, from that of the unprogressive habit that would have the world turn back to old practices to the most fundamental intelligence that would urge the race on toward undreamed-of things. We must take up these five proposed answers in regular order. In our grasp of them we shall find the fundamental clues to the whole interpretation of history. We shall not all agree in our valuation of these answers. In fact these answers will classify us as to our own social outlooks and our educational programs. Perhaps that will be their real value. At any rate, history is to be for us a teacher as well as a subject of study. We turn to these answers given in Athens.

CHAPTER VI

THE FIRST ANSWER: THE ATTITUDE OF THE CONSERVATIVES

We have seen how Athens, rising up through many centuries of folkway development, found herself in the latter part of the fifth century in the midst of an all but complete breakdown of these old folkway controls. Confusion, disillusionment, and anarchy seemed to be her destiny.[1] If, underneath all this confusion, the common life of daily activity still went on in the grip of habit too strong to be lightly broken, yet, on the surface at least, customs of centuries fell away. Individuals found themselves freed from the usual restraints, and old social controls in family, industry, and civic authority failed to meet the situation completely. Athens found herself, as Carlyle might say, "socially naked," the protecting clothes of social custom gone. There was, of course, no escape from this experience if civilization were ever to rise above the level of the folkways. None the less, such an experience must produce, whether in society or in the individual, profound shock.

What shall be done about it? How shall society be reconstituted? How shall the rising generations be educated? How shall the dangerous energies released in this experience be organized for larger social tasks and purposes? How shall rampant individuals be restrained? How shall the future be made secure? But, also, how shall the constructive energies released in this experience be organized into the social life? How shall the tremen-

[1] Cf. "Story of Alcibiades."

dous possibilities of individual freedom and individual contribution be realized? What shall society become? But, most of all, what shall education become under these strange new conditions? As stated above, at least five answers were offered to this problem.

The Answer of the Conservatives.—In Athens, as always, there existed a great body of conservative people to whom this age of confusion brought profound dismay. These were of the older social tradition, opponents of the long democratic movement, essential aristocrats. They were naturally timid of mind. They had privileges which seemed to be threatened by these changes. They were set in their ways and change was utterly unwelcome to them.

Shocked by the disrespect for old customs, the "immoralities" of the times which seem to them nothing short of insanity, they seriously proposed that Athens must undertake to get rid of the disturbers (among whom was Socrates), and then return and rebuild the folkways that were gone. This is the first solution of the problem. Perhaps the most graphic account of the state of mind of this party is to be found in "The Clouds" of Aristophanes. In this play the age of confusion is represented as being steeped in all sorts of destructive immoralities. Morality and religion are both subverted and made to pander to the bauble reputations and financial gains of the Sophists. Ancient moral ideas having real social significance are replaced by modern selfish ideals. Intelligence has become completely superficial, easily developed, easily changed; anything can be taught to anybody for an adequate consideration. Over against this Aristophanes sets the values of the old education:[1] Justice, temperance, hardiness of body and mind,

[1] The student should read these contrasts of the "new" and the "old" educations. See Monroe, "Source Book of the Hist. of Ed.," pp. 82–4.

respect for age, "the education which nurtured the men who fought at Marathon." Is it possible to return and rebuild the old social system and the old education? To the conservative man this seems the only sane solution of a problem that ought never to have arisen in the first place.

Impossibility of the Conservative Program.—Desirable as such a program may seem from many points of view, a very little thought convinces us of its utter impossibility. Socially, the old structure of society is gone. The old institutions are either left far behind or are regarded in utterly new ways, and the most energetic members of the community have escaped from this old respect for custom. There is no likelihood that they will ever be recaptured or that they will voluntarily return. Indeed, they cannot return. Psychologically, it is impossible to forget these new and profoundly convincing experiences of freedom and to reinstate the old habits of bondage to custom. Men have tried that and they have failed. What has been done must be met, not by going backward, but by going forward. There is danger, of course, in going forward. Much that has lasting social worth is likely to be ignored and left behind in the forward movement; much was ignored and left behind. Yet society must be saved in some way; and since the aristocrats and conservatives of the times could do little but wail about the "good old times" and ridicule the new movements, they are quite as much to blame for the excesses of the later times as are the undisciplined exponents of those later times. The new age, the new institutions, the new social order, the new education, must come to Athens. These ought to be developed through the cooperation of the conservative elements and the radical elements. The wisdom of the past and the impulse and initiative of the present ought to collaborate in the construction of the new social and educational world, consciously, inten-

tionally, intelligently. This must happen; it does really happen; but neither side of the argument either admits it or even knows it. Each seems to go its own way.

The Conservation of Old Social Custom and Habit.—Despite the profound shock to Greek life caused by this crisis of the fifth and fourth centuries, despite the fact that society cannot go backward, if it is to go on to higher levels of civilization, despite the fears of the conservatives who saw only ruin ahead for their city, despite the contempt which, as we shall see, the Sophists felt for old customs and habits, much of that old habit and custom still persisted. The work of the world went on. Men ate, slept, toiled, or idled; they married; children were born and grew up in some sort of family and community life; some sort of religious rituals continued; social order in some measure existed. Deep under all the waves on the surface of the social sea the quiet tides of custom and habit roll onward. These social tides are not meaningless, they do not merely repeat the old. They conserve the old, even when we think that older element has been entirely left behind. Out from these struggles of the Greek world emerges the substantial structure of a common life which persists through the Roman period, through the Middle Ages, and on into our own times. It is true that changes on the surface of the social world have always gradually effected changes in the deeper currents of social life. And occasionally some profound revolution has shaken through and through the whole body of society, until even the common mass has thrown off the customs of centuries and taken on the new organization of life. But usually there has been a gradual reaccommodation afterwards. The old has reasserted itself somewhat, the new has yielded a little of its arrogance, and some degree of historical continuity actually obtains.

No social or educational program can succeed, as we shall see, that ignores this substratum of age-old habit in the common life. The answers that we have yet to discuss give promise of being successful or of failing just to the extent that they recognize this most fundamental social and educational factor. Habit is one of the two most profound characteristics of human nature. Its significance for social order, for social progress, for educational stagnation and development, must not be forgotten. The conservative party in Athens made impossible proposals when they suggested that Athens should return to the times and manners of the old folkways. But in that proposal there was wrapped up this other profound and not impossible, but very necessary, fact: that society lives and moves in a great world of habit, and that however profoundly that world of habit may be shaken by critical experiences, the substantial progress of the world is conserved thereby, even though at times it is also hindered thereby.

The other profound characteristic of human nature appears in the next answer that was made to the Greek question, and to that we must now turn.

CHAPTER VII

THE SECOND ANSWER: THE PROPOSALS OF THE SOPHISTS

We have seen that in a time of crisis society cannot go back to conditions as they existed before the crisis; broken worlds of habit cannot be put back together again and treated as if the break were not there. The broken world must be accepted, and the ultimate outcome must develop out of facing the facts, not out of ignoring them.

Characteristics of the Critical Social Situation.—The breakdown of custom released the individual, with many undisciplined impulses and energies, with an inner world of feelings, emotions, and opinions which had escaped the complete control of old habit and custom. The individual stands out—not the striking individual merely, but the common individual. He seems so full of energy, of innovations, of new and untried possibilities that, over against the drab monotony of the old customary life, the world takes on wonderful, new, strange, beautiful colorings and contrasts. These new, even undreamed, developments are surely worth preserving; they are worth more complete realization. As against mere conformity they are infinitely worth while. Folkway society suppresses all these individual contributions and possibilities. Society is an ancient evil to be escaped; the individual alone has lasting worth. Thus does the first articulate voice of the new order answer the wailing of the old order.

The Sophist Analysis of the Situation.—The first mediators of a world of broken habits and customs are always

"sophists." They are as extreme on the radical side as are the reactionaries on the other side. But they perform certain great and lasting services to the world. They take account of the fact that old habits are broken down and that old customs do not any longer sway the consciences and activities of men. They seize upon the energies and impulses released in the crisis and by emphasis, even by exaggeration, they make these new resources of the human spirit stand out until intelligence can grasp them and bring them into use. Thus they commit the race to a definite movement out of custom, out of the longing for custom, into the acceptance of a point of view from which there is absolutely no escape save through the development of new levels of intelligence.

The Sophists said: "Let the individual have free play; that is his right and his proper function. The old customs are gone, and well may they be forgotten. Society is a crime against the individual. Each man should be the judge of his own good; each individual should be the measure of his own world. One man's opinion is just as good as another's, if he can sustain that opinion in an argument. Society is a fallacy; the world is made up of individuals. We do not want systems; we want to get as far from old group-controls as possible. Education is a matter of individual development. Old types of education destroyed individuality. The new education will ignore customary aims. It will make each individual an aim in himself, and it will make of him whatever he may choose to become, for education can do anything with anyone." This is, as is easily seen, practically the complete denial of everything held valuable in the old folkway education and the acceptance of much there held immoral.

The Sophists had no system, unless it was the systematic denial of systems. Theirs was the logic of individualism.

They represent the absolutely necessary, yet socially appalling, task of ploughing up old social soils for the purpose of laying the foundations of the new social order. That new social order did not appear in their own consideration of the future, save perhaps in the vision of a few of the very best, like Protagoras. Their task was the tearing up of the old soils; it was left to other forces to build the new order.

The Psychology of the Sophist Attitude.—But though they had no system, a rather definite tendency runs through all their proposals and activities, and we must see what this tendency is. Customs are universal social bonds holding together in one social unity all those who have been accustomed to them; habit is the individual expression of these social customs. This is the psychology of the folkways. Now habit and custom suppress the originality of the individual. That originality finds chance and room for expression when the folkways break down for a time; and that originality expresses itself in individual impulses, feelings, emotions, energies, and initiatives. These seem to the Sophists the valuable elements in life, and these are possible only when the folkways have been broken down.

But the Greek Sophists were still too close to their folkway ancestry to realize that habits and customs cannot be thrown off so easily and so completely. Habitual attitudes and feelings still persist under the surface of assumed "originality." Especially opinion, which seems individual and which the Sophists valued so highly, is really only the expression of old habit-attitudes, or no less unintelligent contradictions of those attitudes. Hence their "opinions," instead of being surely original contributions, were frequently nothing but the reassertion of old customary commonplaces. They were all the more valuable, perhaps, for that fact, but still that fact shows us how much the

Sophists were deceived in their belief that they had reached the summation of wisdom. Their "opinions" were, as Socrates later pointed out, half-thoughts, something more than mere vague feelings about the world, something less than clear ideas or complete understanding. These "opinions" intentionally break with old attitudes. In that way they make for the progress of the world, but they do not critically arrive at reliable and substantial new attitudes. Hence they are subject to the biting criticisms of later thinkers, and they have turned the term "sophist" into a common reproach.

The Social Significance of the Sophists.—The Sophists professed to teach in all the social fields: morality, religion, politics, industry, education, etc. In each of these fields they declared that a social unity of opinion was of no value, but only individual capacity; that since society did not exist, or did not rightly exist, it could make no difference which side of an argument the student chose. Not the outcome but the method of argument was the ideal, and that therefore each student should be taught only those things which he should need in his future career. This program completely ignores the demands of tradition in education, and it marks the beginning of the world's greatest movement after the folkways are left, the movement in the direction of theory. Life thus far, as we have seen, has been lived without critical thinking, simply under the control of habit and custom. Habit and custom break down; a new order must arise. Shall it be another "rule of thumb" sort of social order? Or shall it find place within itself for the organization of intelligent living, i.e., living based in some genuine degree upon critical investigation of conditions, intelligent organization of the results of those critical investigations, and actual construction of a world of life and action along the lines laid down in this

intelligence? The Sophists did not go far in working out the implications of their movement; but by raising the question, "What does this individual really need?" they opened the way to the only true answer, "That depends upon your theory of the universe, the world, life, education, social order"—an answer that must eventually become the basis of a complete reconstruction of the conditions of existence. However partial or faulty the Sophist philosophy may seem to have been, it was an actual contribution to the progress of the world, the working out of a stage in the development of intelligence and education without which modern civilization could not have been achieved. There is absolutely no way out of the folkways save through "sophism," though the Sophists themselves never completely escape. He who comes through into the world of complete freedom must be at some time a Sophist, but he must become, like Socrates, something more than a Sophist, or at least the "greatest of the Sophists."

The Fallacies of the Sophist Position.—Psychology, as such, did not exist in the Sophist period; hence they failed to appreciate their own half-complete attitudes. Pioneers in the individual advance, they became, as was almost inevitable, individualists, ignoring or denying the meaning and the existence of the "social." They built a new world, or thought they did, out of individual impulse. Thus they thought they were fostering the individual and denying the social control which had hitherto suppressed the individual.

In this there were two big facts they did not and could not know. First, that the individual does not exist and cannot come into being apart from society. Second, that individual impulse may be itself the basis of lasting and permanent universal social bonds. That is to say, society produces the real individual, and society is itself assured in the genuine needs of the individual. But it must re-

main for Socrates, and a thousand thinkers after him, to struggle through the long thought-paths that lead to this result. Meanwhile we must turn to Socrates and ask for the third answer to the problem of the Greeks.

CHAPTER VIII

THE THIRD ANSWER: THE CONTRIBUTION OF SOCRATES (469–399 B.C.)

"MANKIND can hardly be too often reminded," says John Stuart Mill, "that there once was a man named Socrates." But few people, even students of history, philosophy, and education, know why Mill said that, or what Socrates really contributed to the progress of humanity. Davidson says:[1] "Socrates discovered free personality and moral freedom, and made the greatest of all epochs in the world's history." What does such a statement really mean? What was the real work of this man Socrates?

The Situation Reviewed.—It is evident that Socrates contributed something that was of the nature of a distinct advance, a break with the answers of both the conservatives and the sophists, the introduction of something new, the setting of the currents of history into new channels. If we are to understand his work, we must get a clear grasp of his problem.

We have already seen two possible ways of living: life according to habit and custom, as in the folkways; and life according to impulse, feeling, and opinion, as advocated by the Sophists. These are the two answers already proposed. Now if there is nothing further, what must the Greek world do? Is the Sophist program possible? Where does it lead? To complete anarchy, to the destruction of social order, to a world peopled by individuals who have no sense of common relationship? If

[1] "History of Education," p. 101.

so, what is the end of the story to be? But on the other hand, is it possible to go back into the old folkway life, to the bondage of custom and tradition? Where would such a pathway lead eventually? To stagnation, to corruption, to a world that had lost the little gleam of light and had fallen back into despair.

But, if no other pathway opens, Athens must go one way or the other of these two—to a life of slavish habit again, or to a life of unlimited confusion. And in the end we can readily see which of these will happen. Athens will fall back into some sort of unintelligent folkway. Custom and habit will reassert their control over the world, because man must have a social world. Men cannot live the sort of life the Sophists insisted upon. Men cannot exist like grains of sand in a heap, mere atoms of a social mass. Men are the products of a social order, and they cannot live without a social background, a "fatherland" of some sort. This is something the folkways had provided; but the Sophists derided the idea.

On the other hand, have the Sophists offered nothing of value to the world? Must their work go entirely for nothing? That depends. They have offered something of priceless worth, if the world really gets it. But the tragic fact is that the Sophists were incapable of finishing what they began, and their work would be worse than useless unless it were really carried through. They were on a pathway that led to finer, larger, richer fields of living than anything the world had dreamed of. But they did not see, they could not follow to the end. Socrates did see, for he was on the same road, a road which all must travel who would escape from the folkways into a life of intelligence. Socrates followed to within sight of the end at least. He was the "greatest of the Sophists," the first real thinker in the world's history. What was it he thought?

Two Programs, and a Third.—The characteristic of the folkways is Habit. Habit, as developed in the customary life of the folkways, has two aspects. It is first a universal social bond, holding together all who have been habituated; second, it is mechanical, externally imposed, inculcated by means of a fixed education, suppressing all individual impulse, originality, and personal expression. There are here, therefore, a good—the bond of a common social life—and an evil—a mechanical and external system which society imposes upon all individuals for their control.

The characteristic of the Sophist program is Individual Impulse. Impulse also has two aspects. It is first personal, the expression of the inner life, original, fraught with the keenest personal interest, but it is also particular, the peculiar possession of one individual, private, unlike anything else in the world. There are here, therefore, again a good—personal expression of the inner life—and an evil—a particular, private program of living which holds its right to exist against all protest.

Now, the advocate of the older folkway program stood firmly for his proposals, and the Sophist stood firmly for his. It is the glory of one man, Socrates, that he dared to tear these two programs to pieces, to take from each of them the good, the desirable element, to attempt to combine these desirable elements into a new program and to discard the other elements. After all, the significant element in the folkways was the universal social bond, the thing that made society. If some other way of assuring this social bond can be found, no one need insist upon the mechanics of the folkways. Again, the significant thing in the Sophist program is personal initiative, the reality of the individual's inner life. If this can be assured in society, the doctrine of an atomistic world of individuals can be readily discarded.

And so, Socrates assures us, out of these two diverse and even antagonistic programs a third, a new program, can be developed which will combine the good from each of the old. Let us combine the ideal of a real social order, contributed by the folkways, with the ideal of personal initiative and individual expression contributed by the Sophists. So far, so good; but how can this be done? Personal initiative is an impulse; hence it is a particular expression, while social order is a universal expression. Can a particular impulse become a universal bond? The reactionaries would have said "No," and the Sophists did say "No." But Socrates said "Yes," and in that courageous statement he found a way out of both the mechanics of the folkways and the anarchy of impulse into the world of ideas and moral freedom.

Socrates' Doctrine of Ideas.—We have seen that the Sophists had "opinions" and that the people of the folkways had "habits." Socrates partly points out, partly implies, that implicit in every habit there is the "idea" of that habit, that is to say, an intelligent statement of the nature and significance of the habit by means of which two people can discuss the habit, agree upon it, understand it, even work out a program by which it can be inculcated. He fully points out that implicit in every impulse and every "opinion" there is an "idea." He calls these "opinions" of the Sophists "half-thoughts." He tells them that their salvation lies not in these partial products of personal initiative, but in carrying their impulses through until they become "whole-thoughts," that is, fully developed "ideas"; and he insists that when an impulse or an "opinion" has been carried through to complete development, until it has become an "idea," it ceases to be a "particular" and becomes a "universal." That is to say, every impulse, though it may seem to be the most particular

thing in the world, is really an incipient universal. It has its universal significance, and every universal proposition has grown out of some particular impulse or half-mature "opinion."

Impulses and "opinions" then, when they are fully developed, become universals, and instead of destroying the social order as the reactionaries feared and the Sophists hoped, they affirm and assure the social order, or some social order. What the Sophists most emphasized, individual impulse and "opinion," is thus shown by Socrates to be the very foundation of some larger social order, with this advantage over the old social order: the new, developed out of impulses and "opinions," can be both personally possessed by its members and intelligently understood, organized, criticised, and controlled by them. Ideas release us from the machine-made order of the folkways and from the anarchy of the Sophist program into the world of intelligent understanding and control, "the world of free personality and moral freedom," and this "discovery of ideas" marks the beginning of the "greatest epoch in the world history." Socrates occupies the place in history that he holds because he found the way out of both the stagnation of habit and the anarchy of impulse. It is for this reason that "mankind cannot be too often reminded" that he lived. Ideas can take the place of the unconscious mechanism of the folkways on the one hand and the conscious "half thoughts" or opinions of the Sophists on the other. They give man control over his own destiny; they make him free.

The Significance of All This for Education.—Through the work of Socrates the world for the first time reached the conception of a life of freedom that should still be subject to some sort of general rule or intelligence or "law." Here is a freedom not of the "outlaw," but of an encompassing

social order, a social order that has been developed by human nature, by individual growth and thought, a social order that gives both freedom and the sense of "fatherland."

But the doubt arises, can ideas really be social bonds? Does knowledge unite people? Socrates insists that it does. Opinions divide people, because they are accidental, uncriticised, based on old prejudices or other folkway attributes; but ideas unite people, because they have been criticised, shorn of their particular elements, and carried through until only their universal and common elements and meanings remain. They represent really human attitudes, attitudes that all humans can share.

But where do ideas come from? They seem rather wonderful things. What is their origin? Socrates taught in the midst of the busy life of the city. He had no school. He called men aside as they passed along the street and he said to them: "Do you know what you are doing?" Here was his school, himself as teacher, his pupil a man picked up at random or some one who sought him out. He saw that men were going about their living and their work either under the control of mechanical habit or under the urge of some half-developed "opinion." In either case they were victims of external and impersonal controls. Socrates insisted that man's first duty was to "know himself,"—to think through from both habit and opinion to real ideas that he can call his own. Ideas, we thus see, grow out of the very soil of common experience, out of the heart of life, out of the world of work, out of the civic situation. Ideas are social products. In the growth of experience, in the midst of habits, opinions, and impulses, ideas are needed, are called for, are slowly developed and hammered into shape for use, for the control of impulses, for the explanation and criticism of habits, for the fore-

casting of the future. Social experience finds its finest fruit in the production of illuminating and organizing ideas.

Such a discussion probably exaggerates the Socratic position a little, for he did not see all that is implied in ideas. But such an explanation of his position seems necessary if we are to see clearly what Mill and Davidson and hundreds of others mean when they speak in such eulogistic terms of this man. It helps us to see, also, what is meant by the saying, "Socrates brought down philosophy from heaven to dwell among men."

The "Socratic Method."—Socrates taught by asking questions. His questions were directed to the habit he wanted to uncover, to the impulse he wanted to explore, in the hope that he might be able to help "bring to birth," as he called it, the idea that should explain either the habit or the impulse in question. "Asking questions" is not necessarily Socratic. The Socratic method works for the production of ideas in the soil of the pupil's experience. It is like the farmer's use of the hoe. The farmer does not expect to uncover corn when he hoes up the ground. He does expect to stimulate the growth of the corn in and on the stalk, where it should grow. So Socrates asked questions for the purpose of stimulating the growth of ideas within the experience of the student. Such ideas belong to the one who grows them. Such ideas need no further emotional stimulant in order to get them into action. They act because they are outlets which experience has been blindly seeking. Hence the good can be taught, if it is taught so that it rises up within the actual experience of the individual himself; but it cannot be taught by forcing it upon the individual from without. The teacher brings forth; he does not put in information.

The Failure of the Socratic Program.—The great con-

tributions of Socrates are these: he shows the significance, nature, and origin of ideas, and the method of developing ideas as social products. He opened up to the world the unsuspected inner realm of ideal intelligence, the realm of freedom, the realm of civilization and science. He pointed to a gradually growing civilization that should, little by little, realize the meanings implicit in its own habits and impulses, until it should come to know itself and thus reach freedom. He found the way out of the folkways without destroying what the folkways had accomplished. He escaped from sophistry by being the greatest of the Sophists.

But his promises and his methods failed in very complete degree in the Greek world, and for obvious reasons. Socrates stands at the apex of Greek intelligence; decline begins with his death. He failed for two main reasons. The first of these was that the Greek political and social order was rapidly disintegrating, and in such a time men want some immediate solution for their difficulties. Something much more adaptable to the conditions of the times was found in a later answer to this same old Greek question. The Socratic program of building up an intelligent social order from within involved too much time, too much faith in a stable future, too much intelligence, too much knowledge for such an early period in the development of intelligence.

The second reason why it failed was that men are not quite brave enough to face the uncharted future. Humanity is rather timid. Men want certainty, or at least a high degree of assurance. The sophist is the unusual man who breaks with the past rather heedlessly and boasts of his ability to live without social order or community tradition. But most men are lost when out of sight of familiar objects. Socrates opened up the great world of intelligence,

the land of moral and intellectual pioneering. That land is still, after more than two thousand years, not crowded. It is highly praised—from afar. It is the rather rare individual who freely chooses to enter and explore. Is it any wonder that in those earlier days the proposal to solve the world's problems by social intelligence failed to meet a unanimous response? And in the light of the old securities of life, property, tradition, custom, and privilege under the folkways and the daring uncertainties of life in a Socratic social order, is there any real basis for wonder that the good men and true in Athens decided that it was necessary for the peace and security of the city of Athens that Socrates must die?

But we thus find ourselves, through his work, freed from the folkways and standing on the borders of the land of "free personality and moral and intellectual freedom." But dare we go in? Is it not an illusion set for our destruction, and are we brave enough? Is it not too wonderful? Can we attain unto it? Another land, less arduous of prospect and more beautiful, lies at the end of another road. With the death of Socrates, and his consequent discrediting, another leader of the life of inquiry appears. Plato offers another solution to those who want intelligent answer to their question. Socrates is gone; Plato shall be our leader. He is wiser than Socrates, as we shall see, for he does not expect too much of men. Philosophy, education, ethics, religion, social organization—all are turning from the impracticable program of Socrates to the less arduous aims of Plato. We, too, shall turn and follow him into the land of the ultimate good. If, perchance, the path we follow shall lead us into another folkway world, it will at least be a larger and a nobler world than that of the primitive age, and it will certainly be more secure by far than this wild dream of Socrates!

We thus see how the race escapes from the folkways for a moment, only to be frightened at its freedom. We turn now to Plato and the beginnings of the building of a new and larger type of world-folkway. We shall follow Plato and Platonism for more than a thousand years, until once more the spirit of inquiry breaks through the certainties of the Middle Ages and gives us the dawn of the Modern Age, of science, i.e., of intelligence that is sure of itself and that can stand the test of the years.

PART III

BUILDING THE LARGER FOLKWAYS

CHAPTER IX

THE FOURTH ANSWER: THE CONSTRUCTION OF PLATO (427–347 B.C.)

THE answer which Socrates gave to the old Greek question "What shall be done when the folkways break down?" is the one way out of the folkway situation. But it was not a way that the world could take at the time it was given. The world was still too unpracticed in the ways of this freedom, when the whole Greek social structure began to disappear. The people were still too close to the morbid terrors of the old primitive conceptions of life, too close to the anarchies of the days of Alcibiades, too lacking in any clear understanding of the way in which social order grows out of individual necessity, too distrustful of an educational doctrine that asserted that organizing ideas can grow up out of the soil of unorganized, even anarchical, impulses and individual feelings.

From another point of view this program of Socrates was impossible. We now know that the world of knowledge and ideas does not grow by mere addition, by accumulation of fact by fact. It grows by hypotheses. Intelligence builds hypothetical structures and puts them to the test. If they stand the test, the world of knowledge has been greatly enlarged; if they fail, the world still moves on, because not all of life is involved in any one hypothesis. Socrates had no great social hypothesis, capable of stirring the imagination of the age, to offer. He had a method of developing knowledge or ideas. He seems to have thought that men could go on endlessly accumulating

knowledge and ideas, turning customs wrong side out and making opinions submit to analysis. Doubtless this program could have succeeded in a complete little world like Athens was in her days of isolation, but it could not be done in the cosmopolitan days that followed the war with Sparta. Greek life was soon to become chaos; the Greek world was soon to pass out of corporate existence; the "fatherland" was to dissolve into the mists of history. The Greek needed a real hypothesis of a permanent world to help him through this juncture. He needed assurance of the reality of his ideals, of the permanence of his conceptions of the Good and the True. He needed to become possessed of a new "fatherland." Plato supplied this in his wonderful hypothesis of a great spiritual world-order, existent before all earthly things, of which, indeed, the world and all created things are but shadowy copies. Socrates' doctrine of ideas also plays up into Plato's conception in an admirable way. If, as the most complete result of this teaching of Plato's, the world is plunged back into a new folkway organization, we need not wonder too much. History shows one fact beyond dispute: freedom of the moral and intellectual sort is not easily attained, and is kept only by being endlessly rewon.

> He only wins his freedom and existence
> Who daily conquers it anew.

Plato's Problems.—Plato faced two great problems. The first was still that of Socrates: the internal decadence of the Greek life. The solution of this problem would doubtless follow for him the lines laid down by his teacher, Socrates. But the second was a problem that was just becoming evident in Socrates' time, but which became the most obvious characteristic of Plato's period: the political disintegration of the Greek world. Plato was about twen-

ty-three when Sparta conquered Athens. In his lifetime Sparta fell before Thebes. Thebes was conquered by her own sloth and indolence after the death of her great leader, Epaminondas. This meant the end of Greek political life in independent states. Sparta and Thebes had exhausted Athens; Athens and Thebes had crippled Sparta; Sparta and Athens had checked Thebes. All these once promising states had been destroyed in turn. Nothing but anarchy and confusion remained, and the prospect of conquest by some outside power. This was the background of Plato's life.

Now an age like this needs something to help carry social and personal ideals safely through. The familiar "fatherland" has failed. Where shall a new "fatherland" be found? Why do not the "ideas" of Socrates hold this disintegrating world together? Why do not all individuals feel the cementing character of common knowledge and remain true to the social ideal? These are questions that Socrates could not have answered. Plato must go more deeply into the problem. Plato believes in knowledge and ideas more fully, if possible, than did Socrates. But his knowledge and ideas are of a different sort. They have a different origin, a different nature, a different value, and a different function to perform. Let us examine these facts more fully.

Plato's Doctrine of Ideas.—According to Socrates, the new social order will find its controls in ideas. But for him ideas have essentially a democratic origin; they grow up out of the confusions of the common life, in the midst of the world's work, under the pressure of events, and in the process of development of individuals who feel the conflicts of the social world about them and who respond to the stimulations of the social world in this new way. Thus we may see that, for Socrates, any one may produce ideas,

any one may possess them; no one in particular is responsible for them, and no one in particular is authorized to protect them or preserve them. Ideas are social products, and every member of the race must have his share in producing and possessing and preserving them. Now this program will perhaps work out successfully in the midst of a fairly stable world, such as Socrates knew in his young manhood, but in Plato's day the Athenian world goes completely to ruin, and for such a time Plato offers a much more permanent, and therefore acceptable solution.

For Plato ideas are quite as wonderful instruments of social organization and control as they are for Socrates. They are even more wonderful; in fact, they are quite too wonderful to have had any such lowly origin as Socrates supposes. Ideas cannot owe their origin to the shifting, precarious conditions of social life. Moreover, ideas always precede experiences. We have the idea of the thing before we have the thing; at least, the clear idea is necessary to a clear experience. Certainly ideas exist as patterns before anything worth making can be made. This proves that ideas exist before things. Things are but imperfect copies of ideas; ideas are the original reality of the world. The universe is first, a great system of ideas, existent before all things; and the world is but "a shadow" or copy of some perfect, preëxistent idea. Ideas are older than all things else, the eternal realities of which all earthly things are but shadowy copies. Ideas are the eternal forms or patterns, according to which all things were made or patterned.

According to Plato, Socrates seems also to have been mistaken in his conception of the nature of ideas. Socrates seems to have thought of ideas as "social bonds" growing up in the midst of, and out of, the very conditions of social life. Plato thinks of ideas as "social forms" coming down

upon the social world from the heaven of preëxistent forms. Socrates seems to have thought that ideas are flexible, plastic, growing bonds; for Plato ideas seem to have a fixed character. They are finished, permanent forms; they are like final systems; they control life not by growing up within it, but by coming down upon it, surrounding it much as a hoop surrounds a barrel and holds the staves together.

Socrates was therefore mistaken in his supposition that ideas could be the possession of all people. Since ideas are already in existence, they cannot be "developed"; they are already complete; they exist in perfection in the "Heaven of Ideas," a sort of eternal treasure-house of ideas. Hence they cannot become the possession of every one. Men can get them by becoming able to see behind the appearance of things into the eternal realities of things. This requires long discipline, not less than thirty-five years of severest training. Hence these ideas cannot be secured by every one; they are secured only by a very special class of the community, the philosophers. These are men who have a special "golden" nature, capable of long discipline and willing to undergo the training necessary to the perception of eternal truth. Ideas attained by such long processes are far too precious to be lightly made the possession of every one. Just as all are not capable of becoming "philosophers," so not all are to be trusted with ideas after they are secured. The education of the world by means of these ideas is also pretedermined, and is conditioned upon the natures of the people who make up society. We must now see what that education becomes under Plato's system of ideas.

Plato's Hypothesis.—Unlike Socrates, Plato set up a rather complete and definite social hypothesis to bridge the civic crisis of his time. That hypothesis is too comprehensive to be entered into here. It is the substance of

his Republic. Only certain important phases of it can be considered here.

According to this hypothesis, the world is, first, ideas, and afterward, things. Good conduct, good social relationships, good government, therefore, must all be based upon clear grasp of ideas. This makes the acquisition of ideas the most important aspect of individual and social conduct. But all sorts of false representations and perversions of ideas are floating around. This makes necessary the development of a particularly selected and qualified type of individual, the thinker or philosopher, whose business it shall be to discern ideas and deliver them authoritatively to the world. The state will be perfect only when it is governed by the philosopher. "Until then, philosophers are kings, or the kings and princes of this world have the spirit and power of philosophy, and political greatness and wisdom meet in one, and those commoner natures who propose either to the exclusion of the other are compelled to stand aside, cities will never cease from ill,—no, nor the human race, as I believe,—and then only will our State have a possibility of life and behold the light of day."[1] That is to say, the only realities, the only things that will surely live through the ages of social confusion, are ideas. The state finds its lasting reality, its real existence, in its ideas or ideals; the individual, also, can find his necessary "fatherland" only in some realm of ideas. The fixed and ideal order of the universe, slowly becoming known to the philosopher, gives absolute assurance of the permanence of man's moral and spiritual hopes. And education must bend its every effort to find and develop those men who are capable of becoming philosophers, for the salvation of the world depends upon them.

But this practically makes of education a purely intel-

[1] "Republic," V, 473.

lectualistic matter. Man has no share, as Socrates supposed, in the development of ideas. A few men, the philosophers, are to discern them; all the rest of the race are to learn them and be bound by them. Impulses, feelings, emotions, novelties in social stimulations and the like, all of which were so important to the Sophists and Socrates and out of which Socrates seems to have dimly felt all the new and larger social order was to come—these aspects of life are, for Plato, evils to be controlled by ideas. Knowledge comes down upon life from above, and it can be "taken on" by nothing but the disciplined intellect. All that is good or true or beautiful, and therefore worthy of human endeavor, exists beforehand in the "Heaven of Ideas"; at the most, men can discover these preëxistent treasures. Hence education for the philosopher consists of such discipline as will make him fit for this high task of discovering ideas; while education of all the other members of society consists of discipline in habits of subordination to the fixed aspects of the social system.

Plato's Social System.—Plato interprets the movements of his times in such a way as to establish what may be called an intellectual aristocracy. He conceives of the social world as being analogous to the nature of the individual; and he finds in the individual three aspects: intellect, the passions, and the desires or appetites. The virtue of intellect is prudence, or foresight; the virtue of the passions is fortitude, or fearlessness; the virtue of the appetites is temperance, or moderation. The hope of society lies, of course, in the intellect; and when the passions and the appetites lend their energies and fires in proper measure to the support of the intellect, the life of the individual becomes rightly balanced and justice, as an individual affair, is established. Corresponding to this individual nature, with its threefold character, we find the social world

manifests three aspects, or classes. First, there is the class of philosophers, whose business is the discernment of ideas, whose virtue is wisdom, and whose duty is leadership of the state. Second, there is the military class, whose business is the protection of the state, whose virtue is honor (in the military sense) and who owe obedience to the ruling class. And third, there is the "working class," whose business is producing the physical goods of the state, whose virtue is the creation of wealth, and whose lives are to be completely dictated by the military powers under the commands of the philosophers. Membership in these classes is not determined by birth. That one fact alone redeems Plato's conception from absolute Orientalism. Membership in these classes is determined by a sort of abstract "native fitness" as this comes out in the processes of education and training. Education thus becomes a process of sifting the whole rising generation with a view to determining the respective class to which each shall belong; and after this determination education becomes specialized to fit the members of each class for that life each will normally live.

All this seems to offer something like essential freedom, or rather like the pathway to freedom, for Plato bases the whole structure of civilization and the whole hope of humanity upon knowledge, ideas. Thus social progress, education, the development of the life of man religiously, politically, and esthetically—these are all to be controlled by the true insight of the philosopher. In this way all progress, all education, all development, becomes subject to intellect and is dominated by intellectual consideration. Yet for just these reasons all is finally lost in the mazes of intellectualism. For Plato there is no real progress, as progress is conceived in evolutionary terms. Whatever is to be exists already; only the intellect has not yet discerned its

existence. Progress is therefore not a realization of new existence; it is merely the uncovering of the already existent. That makes it wholly a matter of the intellect; and intellectual progress seems to imply the eventual rooting out of all the evils of anarchic impulse, feeling, and emotion, a culmination that seems to be reached socially in the stern rigors of the Roman Empire.

Plato's Influence.—This great social and educational program of Plato's states the hypothesis of an educational and social experiment at which the world worked rather strenuously for two thousand years. It may be called the most extensive scientific experiment the world has ever hitherto known. For if a scientific experiment essentially consists in putting an hypothesis to the test of actual conditions, then in this after-history of Platonism we have a scientific experiment. Plato's hypothesis that reality is idea and that therefore the whole world can be finally stated in and controlled by intellectual terms became the dominant social influence for nearly two thousand years. It was tested under a wonderful variety of social conditions, as we shall see, and though it failed, its failure is still a brilliant memory. Because the statement was not sufficiently exacting, its upholders called to their aid the more extreme hypothesis of Aristotle (to be noted shortly) and all but succeeded in proving the final truth of their great proposal. We shall come upon that full story little by little as we proceed. Here we need mention only that Plato really draws his scheme of social reorganization from the old folkway world, especially from the folkways of Sparta, which he idealizes and criticises and fits to his social needs. Platonism is really a mighty attempt to justify the folkway type of social organization, for Plato's ideas are but the explicit expression of the implicit customs and habits of the old folkway worlds. To the mem-

ber of the old primitive group, life found its security and its finality in conformity to the controls of custom and habit. All individual caprice or impulse or initiative in the folkway world was of the nature of evil; it might bring about the final destruction of the group. This was so in Plato's universe. Plato's thesis might be stated in this wise: Life, i.e., the permanent form of life, is that fixed, criticised, and final system which is found only in the product of the disciplined intellect, corresponding to the fixed system of customs and habits of the folkways. In order to live fully, one must know, just as in the old folkway world the individual must be fully habituated. Salvation from the evils of the world comes through clear conceptions and conformity to the system which these clear conceptions establish, just as salvation from the evils of the primitive world came from membership in and conformity to the system of the group. Impulses, originalities, initiatives, and the like are all evils to be controlled by ideas, just as in the folkway world all impulses were evils to be controlled by the customs of the group. The perfect life is a life of completely organized, adjusted, and balanced ideas, which includes the whole range of personal and social living and which has secured absolute control of all lesser details of existence, just as the perfect life in the folkway group was the life which had become completely habituated, without dangers or fears or signs of impending change either within or without, a sort of life which fulfills the old statement, "a people without a history."

This large hypothesis was, as we have said, eagerly accepted by the ages that followed Plato. The conditions of civilization for two thousand years helped to emphasize the importance and significance of this great interpretation of the world. The Roman Empire embodied it in political forms; the Middle Ages organized it into their religious

system, including in it, in one timeless whole, past, present, and future. It came to its full test at the climax of the Middle Ages. Education was controlled by this conception through practically all these centuries. Almost all the efforts of all the powers of authority in state and church and school and social order were engaged for the great task of proving it true. But it failed! It failed to meet the larger tests which non-intellectual processes in the social world brought against it. At the height of its excellence and in the midst of its glory it was broken.

For four or five centuries the modern world has been trying to escape from the lingering implications of endless fragments of this old hypothesis and from the false educations that were developed in the ages when the hypothesis was still under scientific test. Emerson said, "Plato plays havoc with our originalities," meaning that since Plato no one has been able to say or think anything new. That is not true. But there is a sense in which Emerson's statement is most profoundly true. Under the dominance of the Platonic system there is scant room for anything new or original in the sense of science. To be sure, Plato has been one of the most "suggestive" thinkers of all time; many ages have returned to him for "inspiration," not the least of which was the Renaissance, the first full expression of the "modern spirit." But Plato's social and educational system offers no fundamental inspiration in the modern struggle for democracy; its structure is too much wrought out of and into the limitations of the folkway ages. In this sense Plato laid the foundations for the building up of the larger folkways of the Middle Ages; and in this same sense escape from the domination of Plato constitutes the greatest problem of the present, whether in social organization, religious attitude, moral conception, or education.

We must now go on to discover how for fifteen hundred years the task of rebuilding or building the larger "folkways" under the leadership of Platonism went on; how diverse elements were conquered and absorbed; how new problems brought the development of new controls and new sanctions, all in the old spirit; and how in due time all this building came to its great climax. We shall see how for fifteen centuries the human mind was subjected to the discipline of this all-inclusive system. After that we shall face the task of seeing how the human mind broke away from this all-inclusive system, declared it inadequate, and undertook the building of new systems with new aims, new purposes, new materials, and new tools. But before taking up this task we must linger for a moment to consider the fifth answer to the old question of Crito, the answer of Aristotle.

CHAPTER X

THE FIFTH ANSWER: THE WORK OF ARISTOTLE (386–322 B.C.)

We need not linger long in our discussion of the work of Aristotle at this time, for, while his general point of view was more practicable than that of Socrates, and more scientific than that of Plato, it meant very little as an educational program at that time, and it had little if any influence upon the educational developments of the immediately succeeding ages. We shall find its real values emerging after fifteen hundred years, but we must note its main characteristics here.

The Historic Background.—Aristotle was fortunate enough to live in that brief period when Philip of Macedon and Alexander the Great had once again made a secure social order in the midst of the universal social confusion. Such a period of social security and stability gave opportunity for the reappearance of the old doctrine of Socrates, that knowledge, ideas, develop out of the processes of human experience. Aristotle renews this doctrine after a fashion. But the uncertainties of the past and the no less real uncertainties of the future made a full reliance upon that Socratic principle precarious, if not impossible. There must be, as in Plato, some principle not involved in the uncertainties of human experience upon which social order can depend. Hence Aristotle shows a curious blending of attitudes that are both Socratic and Platonic in origin.

Now in those stirring years from the great awakening in

Greece that came with the Persian Wars to the age of Alexander there had been a wonderful extension of human knowledge, with wide explorations into the hidden regions of nature and human nature. Aristotle was the first to recognize the extent of these developments, and he made the first attempts to comprehend, organize, and systematize them. He thus attempts to gather together all the knowledges that have grown up (the Socratic attitude) and to enclose these materials in complete systems (the Platonic attitude). Just as Alexander attempted to organize the civic turbulence of the times into the forms of a great world-empire, so Aristotle attempts to organize the intellectual turbulence of the age into logical systems. He gathered its treasures from all the past; he carried his investigations into all the ranges of contemporary knowledge; he laid the foundations for intellectual dominion over the scattered elements of knowledge.

Aristotle as Scientist.—Aristotle is the world's leading example of the deductive scientist. It is true that he was something of an observer, and, to the extent that observation enters into the modern inductive method, Aristotle foreshadowed modern science. But observation covers a multitude of intellectual shortcomings. Aristotle frequently went observing with his mind already made up, in which case his "observations" succeeded in finding nothing but illustrations of his preconceived principles. Perhaps, since we shall have occasion to deal with this aspect of the subject again and again, it may be proper to discuss here the differences between various sorts of observation and various kinds of science. There are three definitely distinct sorts of observation: first, observation with an "empty mind," if that be possible,—just "looking 'round." This begins nowhere, and ends nowhere; it has no plan of work and no criteria of accomplishment. If it produces any-

thing, it is wholly by accident. Such "observation" is not science at all. Second, observation with the mind already made up, with principles already established, and with categories finished. This begins with certainties and anything new comes to be merely an illustration of some old principles. This is the deductive method and is a proper part of science, but only when it is used for the purpose of clearing a way through some wilderness of experience which is later to be subjected to further critical reëxamination. The third sort of observation is that of true induction, in which the mind has, of course, its principles, its categories, its standards to be used, but to be used as hypotheses, that is, to be held subject to correction, criticism, reconstruction, even to complete denial, if the facts warrant. It should be seen that in modern science there is a certain blending of the deductive and the inductive methods, but in ancient science there was practically nothing of the modern principle of inductive observation. Aristotle himself never fully reached this procedure. Aristotle is the "father of deductive science," the originator of many systematic beginnings of human knowledge, the first organizing mind giving form to many sciences, including psychology, logic, ethics, and esthetics. He was, for that time, what may rightly be called a "world-mind." He gave impetus to the organization of knowledge, an impetus that was to have great issue in the next, the so-called "Alexandrian" age.

But he was essentially an "imperialist" in science, as Alexander was an imperialist in politics. His influence in the next age turned men toward compilation of existent knowledge and away from creative work. His comprehensive world-mind set all his followers to imitating. They all become second- or third-rate men, filling the library at Alexandria with extensive systematizations of, and commentaries upon, the world's existent knowledge. The sig-

nificance of Aristotle in the history of thought and education is summed up by Eucken as follows: "He never has led a progressive movement of thought nor ever afforded to any a valuable stimulus. But he has always proved valuable, in fact indispensable, whenever existing bodies of thought required extension, logical arrangement, and systematic completion."[1]

The Influence of Aristotle.—Aside from a certain general stimulus to collecting and editing of existent materials, Aristotle failed of productive educational influence in the ancient world. Shortly after his death most of his works were lost or carried away into the East, to be the possession of Eastern scholars for a thousand years, to be lost to the memory of Europe. Plato filled the imaginations of men; his eternal world of ideal realities so much more completely met the needs of the ages of confusion that followed Alexander's death that Aristotle's way of stating the problem was not missed. So for more than a thousand years he remained in the obscurity of the East. And when he came into the West again, he came not by the will of European influences, or from Greece; he came by the way of Africa, brought into Europe by the Saracens, and his first interpreters to the astonished Middle Ages were certain great philosophers in the universities of the Moslem Empire.

But Aristotle came back into the consciousness of western Europe at a time when he was most needed, when the final touches were wanting to the completion of the great folkways of the Middle Ages, when the work that was begun under the influence of Plato was about to fail, because Plato was, after all, too human. Aristotle arrived just in time to complete this work of the fifteen hundred years of Platonic influence which Plato himself could not complete.

[1] Eucken: "The Problem of Human Life," pp. 72–3.

His great capacity for organization, for building systems, came into excellent use. His logic was the one thing needed to squeeze all the rebellious human elements into the comprehensive world-system and make them submit to the central authority of existent fact. He thus completed and rounded off, in thought at least, the most magnificent conception of civilization and social order the world has ever known. He still speaks eloquently in the pages of Thomas Aquinas and Dante.

But we must take leave of him here to follow the thread of system-building and system destruction until we meet him again, fifteen hundred years later, at the height of the Middle Ages.

CHAPTER XI

THE ALEXANDRIAN PERIOD

History moves on, and old problems are lost to view in the changes of social conditions. The question which Crito asked Socrates had, by the time of Aristotle with his fifth answer, no more than a theoretical interest. Aristotle was not, in reality, answering that question at all. The Greek world had passed away; Alexander's brief empire of the world was passing likewise; Rome, looming larger in the West, was still unsuspected of world-ambitions. The common life of the world, that world of work by which the philosophers are fed, had settled its own perplexing questions in its own groping ways. The life of the intellect, at least of Platonic ideas, was not for it! The intellectual greatness of the period from Socrates to Aristotle was not continued in the next centuries. The world settled down to the task of digesting and assimilating the materials already discovered. Rather, that was one of its interests, but another problem was keenly felt also, as we shall see.

The Dominance of the Platonic Conception of the World.—Though the intellectual life of the world still centered at Athens for another century at least, the period following Aristotle is called the Alexandrian, because the most striking influences and the most distinctive work came from Alexandria in Egypt. This age was a period of "filling in" of the details of the great pictures that had been worked out by Socrates, Plato, and Aristotle. Socrates, of course, was but a memory; Aristotle rapidly passed from sight; the dominant mood of the age is a Platonic mood.

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There is need of a world beyond the world of the senses, a world of knowledge, of intellect, of ideas, into which the superior individual can retreat to find sanctuary from the storms of the world! This Platonic world of knowledge and ideas became the object of exploration by all the intelligence of the times.

But there was a great dearth of master minds. Barrenness and pedantry are almost completely the marks of the period. There was much research, but almost no creative activity of mind. Reverence for the old masters destroyed intellectual independence, producing formalism in place of freedom. There was almost no new writing of a constructive sort, but endless editions of the works of the masters, such as grammars, commentaries, and expositions, appeared. In Alexandria various languages and cultures came into close contact. Comparative studies arose. Translations from one language to another were made, among them the translation of the Hebrew Bible into the Greek, giving that version known ever since as the "Septuagint." Later there were "accommodations" between these various cultures, out of which arose some of the strange philosophies and religious and mystical sects of the Roman times.

Development of Sects.—The teachings of the masters and the contacts of cultures brought about the development of philosophic "schools," each with its ideal of life. It must be noted that the ideal of the age was not man as a member of a social order, but a sort of abstract, individual man. What were the characteristics of this ideal individual? These are, of course, educational as well as social ideals. Among the Greeks two such ideals appeared. First, the Stoic sage. For the sage the natural world is the expression of reason. Hence conformity with nature is conformity with reason; convention is good when it is nat-

ural and reasonable. "Keep the straight course, following your own nature and the nature of the universe; and the way of both is one." "Live with the gods. He lives with the gods who ever follows his mind and reason." This is a variation of the Platonic conception, but only a variation.

The second of these later Greek ideals was that of the Epicurean philosopher: "The end of our living is to be free from pain (that is, from all useless desires) and fears. And when once we have reached this, all the tempest of the soul is laid." Hence all systems, whether of science, ethics, or religion, that tend to arouse and encourage men's fears or desires must be evil. The most complete freedom from desire, from fear, from ambition, from pain, is the most complete life. Compare with this Plato's "justice" as set forth in the Republic.

In addition to these two dominant ideals of the Greek part of the Alexandrian world, it is worth while to call attention to another ideal that developed among the Hebrews, the "Suffering Servant of Jehovah," since at a later time this ideal comes in upon the Greco-Roman world with conquering power. That ideal is expressed in the well-known words: "He was wounded for our transgressions, he was bruised for our iniquities; the chastisement of our peace was upon him, and with his stripes we are healed." A more intelligible statement of the same ideal is found in a later formulation: "He that would save his life must lose it; he that is greatest among you, let him become the servant of all." This conception becomes the most effective weapon in the later struggles of mankind to escape from the iron rigors of the Roman Empire.

The Fate of the Common Life.—The intellectualisms and the scholarship of Alexandria cut the world in two, into horizontal strata. An upper level of "superior" minds is busy with the culture of the world, its knowledge, its intel-

lectual interests. These build citadels of culture where they dwell apart from the world of common interests. At the same time, however, they must be fed and clothed. Hence on a lower level the workers must perform their allotted share, finding their satisfactions in their work and in their religion which promises them more or less of a happier time in some other world, or at least sweet forgetfulness in death. Now and then, perhaps, the workers found help in some crumb of culture that fell from the high tables of learning. But all too frequently common life, denied its share in the intelligence "which makes men free," falls a prey to all forms of religious doctrines which, while they interest and even soothe, may also destroy. The Alexandrian Age gradually witnessed the growth of that terrible mingling of religious cults, good, bad, false, true, vicious, indifferent, which finally included everything known, and which in Athens added even one more touch—a statue to "The Unknown God."

What could the education of the common life be in the midst of such developments? Little beyond the practice of daily toil. Socrates had promised something more, some share in the life of intelligence. But Plato had consigned the common mass to the life of unilluminated toil; and in the dominance of the Platonic view of the world through all this period there was no hope for the common life, save such hope as ever lies in work. The discipline of centuries of work will prepare the workers for the democracy of the far future.

The Growth of Science.—At Alexandria some considerable work in the physical sciences was attempted. It is in the Alexandrian Age that Euclid laid the foundations of geometry, Apollonius began the study of conic sections, Archimedes carried through some still-famous experiments in physics, Eratosthenes computed the diameter of the

earth, Hero and Philo worked out some fundamental principles in dynamics, and Hipparchus laid the foundations of that ultimate knowledge of the universe which was summed up in the cosmography of Ptolemy. These were real achievements, but they seem to lie outside the currents of the times, to wait unnoticed for a thousand years.

The Age of Schools.—On the whole, it was a juiceless age, a text-book age, an age of endless repetition of the authoritative statements of the masters, an age of schools. It was an age in which a type of conventionalized intellect was "made to order" out of the books, the apotheosis of Plato. Education came under the control of the state, at least in Athens. In Athens were the older schools, the Academy of Plato, the Lyceum of Aristotle, the Stoa of the Stoics, the school of Isocrates the rhetorician, and finally, at a later date (probably in the second century A. D.), the university, which was really but the integration and extension of these older schools. In Alexandria the great library grew to amazing proportions; with it developed the museum. But as we have seen that formalism was the characteristic of the age, we need not be surprised that the library, with its endless opportunities for copying authorities, was the central factor in the "University of Alexandria."

In these schools grammar, rhetoric, logic and philosophy, now become little else than endless dialectic, were the studies. The basis of most of this development for four hundred years was reverence for the written word. Hence the age appears as one of the least creative in all history. But it performed a great service in the furtherance of the general Platonic organization of civilization; it molded men's minds to the belief in authority, the fixed intellectual and moral order. It was a step toward the complete organization of the civilized world into one gigantic system.

It was educating the race to get ready for the all-inclusive folkways.

The Coming of Rome.—As Rome rises more and more into prominence in the West, with her growing dominance of the political horizon, with her growing sense of world-empire and organized civic life, she comes to seem the embodiment of all authority, all system, all organization, all control. She may even be (who knows?) that ultimate political order, preëxistent, eternal, the idea of social organization, for which Plato longed. It is true that for a moment and instinctively, racially, the Greeks fought for their independence from Roman control. But one battle was enough to convince them of the uselessness of the struggle. Corinth was destroyed in 146 B.C., and the story of Greece as an independent nation or people came to an end. But Greek thought had been so long dominated by Platonic conceptions that Greece soon found herself quite at home in the social and political structure of the Romans, and she turned with vigor to the intellectual conquest of her conquerors. In this she was largely successful. What Rome lacked of power to theorize, Greece supplied; what Greece lacked of practicality, Rome supplied. The Roman political and social order furnished the security, the system, which made an admirable background for the actualization of that empire of control which Plato found to be the ideal of the universe. Rome furnished the necessary social structure out of which could be built up those larger folkways which should, in their good time, once more reduce the round of life to fixed and rigid routine. Greece furnished the intellectual content and the method, the logic and the sanctions, by which those larger folkways should be organized. Cæsar was the political organizer, Plato the intellectual; and when Plato failed because he was too human to follow Roman authority further, Aristotle (as we

have noted) came to the rescue and gave the Intellectual help that carried the effort through to full conclusion.

We must now turn to a survey of the Roman contributions to this process of reconstructing the world.

CHAPTER XII

THE ROMAN CONTRIBUTION TO THE LARGER FOLKWAYS

Education Under the Primitive Roman Folkways.—As in all primitive communities, education in early Rome was provided for in the customs, habits, and traditions of the folkways. Rome began as a small group among hostile neighboring groups. Her folkways developed out of these conditions, and her education repeated her folkways. Preservation of the group, keeping unchanged the customs, habits, and methods that had made her life successful so far, training of the youth in the preservation of the folkways, in military efficiency, and in the work by which the group lived—these activities made up the life and education. Obedience, reverence, industry, frugality, seriousness, courage, and eventual gravity were virtues native to Roman soil and Roman development.

Children learned to read and write, if at all, in their own homes in the early period; and they learned the stirring military songs and ballads of common folklore. Girls learned the tasks of the housewife in their own homes; boys probably largely followed in the footsteps of their fathers as to occupations. One thing seems sure: In the early centuries, while the Roman folkways remained intact, industry and the other substantial civic virtues became organized into the character of all the children. *Constantia,* constant firmness; *virtus,* the fortitude and strength of a man; *pietas,* reverence for the gods and for the folkways; *modestas,* self-repression; and *gravitas,* the dignity fitting

the man and the citizen—these were the five great virtues of manhood.

There were no schools in the modern sense of the word. About the middle of the fifth century B. C. Rome came upon what may be called the "Oriental level" of her development. The so-called "Twelve Tables" of the law were written down; the folkways became more definite and fixed. From that time on education became more institutional, with these Tables as the curriculum.[1] It may be seen from these Tables that the Roman was a complex character. He enjoyed the conflicts of the courts; he lacked imagination and idealisms; he was practical, systematic; he was extremely pious, in the folkway sense; he was lofty-minded in thinking about his own community, brave in the presence of community dangers, obedient to the death when duty called, but he was at times coarse, rapacious, and cruel to his captured enemies and to those who did not belong to his own group, a virtue he shared with most primitive peoples.

Later Educational Developments.—We note two main tendencies in the Roman character, viz., the tendency toward magnanimity of mind, and the tendency toward cruelty, coarseness, and rapacity. The development of Roman history helps each of these tendencies along. The coming of Greek culture tends to the development of the finer qualities, at first at least; but the rise of imperial ambitions and the growth of world-power tends to develop the other side. Let us see.

In the middle of the third century B. C. Greek influence began to be felt in Rome. Greek literature was introduced in translations and Latin literature was stimulated thereby. The Greek school soon began to take the place of the older Roman *Ludus,* or play-school. Greek teachers, mostly slaves, came to Rome, and the Greek language was studied.

[1] For these tables see Monroe: "Source Book of the History of Education," pp. 334–45.

Rhetoricians and philosophers also came or were developed, and in such numbers as to frighten the senate. In 161 B.C. and again in 92 B.C. efforts were made to stem the tide of this Greek influence and turn back the education of the people into the old folkway currents. "Our ancestors have ordained what instruction it is fitting their children should receive and what schools they should attend. These novelties, contrary to the customs and instructions of our ancestors, we neither approve nor do they seem to us good." But the fight was a hopeless one, and though the progress of Greek culture was slow, it was sure; and in the imperial period it completely triumphed as the method of school education.

But in the meanwhile Roman energy was sweeping the neighboring nations into the protecting care of the growing empire. Roman courage, practicality, and imaginativeness made the Roman armies invincible. Rome drew on toward being the ruler of the world. Her practical courage and legal sense helped to organize discordant elements into a sort of imperial unity. Using brutality where that was needed, or practical intelligence where that was needed, she slowly conquered the world, brought to the endless ages of warfare the experience of the "Pax Romana," won a world-wide peace by "fighting for it," and "civilized" whole peoples in a day by handing down her ready-made civilization from above. When it became apparent that Roman political machinery made such an admirable setting for the Platonic culture of the Greeks, protest against Greek culture came to an end. Greek logic furnished the intellectual weapons for the justification of these Roman methods of civilizing the world; and Roman legions were the objective embodiment of the absolute sway of Greek culture. The Roman army was an ideal representation of Plato's "military class," who were to take orders from the philosophers

and to keep the common masses in control. To be sure, it can scarcely be claimed that many of the Roman emperors fulfilled Plato's ideal of a philosopher, but in the empire there was a governing class which gave orders to the soldiery, and this impersonal military class, fully freed from all personal qualities, did keep the masses of men under control for the most part. This whole task of organization and administration of the empire was no small accomplishment, for the government was gradually extending its sway over wide and far-reaching areas. Within these were found many sorts of geographical condition, with many kinds of folkways, great variety of more or less localized industries and occupations, with their accompaniment of varying desires and prejudices, many languages and many religions. All of which had to be appreciated, largely coördinated, and administered from one capital under one general conception of law. It is true that this administrative conception of the law was rather Stoic than Platonic. That is to say, the Roman found his basis for the conception of a universal empire with a common law in the Stoic conception that nature, and especially human nature, embodied a "natural law of reason" which, when fully understood and applied, would give the world completely organized social order. This conception is, however, just a variant of the Platonic view; it is Platonism toned down to the needs of practical administration. At any rate, whether Platonic or Stoic, the Greeks furnish the organizing intelligence and the sense of an ideal and all-embracing moral and social order which the statesman must rule; the Romans furnish the practical mechanisms of discipline and control, and the actual working rules of the law. In these two aspects of experience, theory and practice, are laid the foundations of the Greco-Roman Empire, ruler and arbiter of the world in social custom, morality, religion, and education.

Schools of the Imperial Period.—Just as back of the Greco-Roman program of conquest with its "benevolent assimilation" of alien peoples stood the Roman legions with their power to do what the governing powers determined, so back of the Greco-Roman program of civilization stood the "schoolmaster," or intellectual taskmaster. Wherever there was a school, there the arbitrary materials of Greek learning were imposed, or the no less intellectual materials of Latin culture. Of course, just as in old China, some youths learned these lessons. But the point is that education was simply conceived as a means of continuing the victorious progress of the Empire. Individuals, provinces, peoples, nations—these count for nothing as against the Empire. The Empire must prevail; and though there were periods of good-natured tolerance when it was considered that any one who was not against the Empire was for it, yet whenever occasion arose the Empire could deal harshly with its rebellious subjects and did not hesitate to destroy in order to establish control. For instance, take the destruction of the Jewish nation in 70 A.D. In the case of this nation refusal to accept some little share of Roman culture brought about the final catastrophe.

The *Ludus* was the lowest school, dating from pre-Hellenic times perhaps. Reading and writing were taught, and some simple arithmetic with simple counters, etc. The method of teaching was the purely memorizing sort, including the imitating of the teacher. A militaristic sort of brutality pervaded the schools, and the teachers were noted more for their ability to "discipline" than for their power to teach.

In the school of the *Grammaticus* foundations were laid in literature, the writings of the historians, perhaps, and some simple elements of very rudimentary science, including the little that was known of mathematics (which was very little

and very unsatisfactory because the Roman system of notation made progress practically impossible). We may add to these items, perhaps, a little music, with here and there a trifle of elementary philosophy or dialectic.

The schools of rhetoric carried on the process, for a few selected students, into the training for public life, into the law courts, the forum, etc. Gradually the "orator" came to be the highest ideal of the educated person; the term is rather inclusive and is not always clearly defined. Cicero (106–43 B.C.) first clearly set forth the ideal. For him the orator probably includes all that Cicero himself was—philosopher, rhetorician, soldier, statesman, patriot, historian, and poet. Later Quintilian (35–100 (?) A.D.), himself a teacher, set forth in great detail the same ideal, the orator, who was to be identical with the cultivated man of affairs and broad public interests. These conceptions of the educated man represent the high tides of theorizing about education in the Roman Empire, at least in the West. They never became effective in the actual educational procedures of the Empire. The state controlled all education, and these ideals are far too liberal for the mood of the times. The actual social situation made a liberalized conception of education impossible of application. The imperial ideal and organization, fighting with savage or half-civilized peoples on many frontiers, could have little sympathy with anything liberal. Imperialism and a liberal education are not congenial.

But if a liberal program had been possible in practice, there was no such program to be had. Psychology was not yet prepared to analyze the problem of education. The only conception of method was the imperial one of force, and in a mechanical age the conception of the processes by which the liberalizing of intelligence and the humanizing of society go on was utterly lacking. Socrates had proposed,

it will be remembered, such a humanized education in Athens generations ago, but there had been no room for it in Athens and there was less room for it in Rome. No, the world will wait many generations more for the full exploration of the processes by which a liberal education comes to be an education, in which machinery, habit, custom, tradition, folkway, can be thwarted and the freed spirit can come into its own. Certainly in Rome such understanding will not arise, though maybe even in some distant part of the Empire some hint of it may appear. Who can tell?

But Rome is just Rome, extremely earnest and precise in her conceptions of law and in working out the consequences of law. The Romans were good-natured, for the most part, in their submission to law. At the same time they were "cold, calculating, selfish, without enthusiasm or the power of awakening enthusiasm," "proud, overbearing, cruel, rapacious," yet "distinguished by self-control and an iron will" and with few "graces of character." The Roman Empire was the instrument of a great organizing movement. The known world was brought together, mastered by Roman armies, controlled by Roman laws, bound together by great Roman roads. Ages, races, peoples, became acquainted within the Empire. The world was Romanized on its political side and Platonized on its intellectual side. This is a significant fact. We shall see more of its significance later. Now we must turn back for the purpose of summing up the general educational situation as it existed in the Greco-Roman Empire in the early centuries of the Christian Era, while the Christian movement was still merely a local disturbance in a remote corner of a distant province. We must see the nature of the Greco-Roman organization more clearly, in order that we may appreciate more fully the next great stage in the development of the argument.

CHAPTER XIII

THE EDUCATIONAL SITUATION IN THE GRECO-ROMAN EMPIRE

We have already seen how the social world of the Greco-Roman Empire had become compacted of streams from many lands—peoples, customs, cultures, religions, moralities, and philosophies. We have seen how Greek thought, after Socrates, had become Platonized until it became absolute, systematized, intellectualistic, lacking in humanity, careless of personal impulses, individual energies, feelings and emotions. In this sense Plato and the Platonic influence represent a return toward the old folkway life, with the same unintelligent carelessness of all that is personally worth while to the individual. We have seen, too, how the Roman Empire provides an admirable political background for this absolutism of thought, how the Roman army provides the ideal tool for its "inculcation." We have seen how that fine originality of mind and spirit in Socrates, in Plato, and in Aristotle, became gradually organized into "knowledge," written down in the authorized texts and presented with authority in the schools. "Live from within" becomes "Live according to the books," "Know thyself" becomes "Know the books," and the free spirit of Socrates is lost in the machinery of political and intellectual life.

We have seen, too, how under the surface of this over-intellectual but under-intelligent life there grew up in Alexandria, and eventually all over the Empire, a wild orgy of religious cults, "mysteries," theologies, and practices which offered some human, even though degrading,

outlet from the sterilities of this absolute existence of the social order. This growth of cults and the like had largely come about through the meeting of the East and the West, those two diverse civilizations which had jarred at Marathon, which had overflowed each other in the Alexandrian conquests, which had clashed in the West in the Punic Wars, and which had gradually interpenetrated until, in Rome at least and perhaps in many other places, all the cults of the world were known and good naturedly tolerated as mostly harmless. The Greek philosopher had become an absolutist absorbed in the contemplation of eternal truth or denying the existence of eternal truth, as struck his personal fancy. In either case he was useless to humanity. The Roman citizen had become politically "absolute." His rights and duties were not personal to him; they were the inherited characteristics of his position as citizen.

The common mass of mankind was, of course, brutalized under this system. Lacking all human rights, except the right to work, robbed by tax-gatherers, overridden by the soldiery, they took refuge in "religion," or they clung to the refuge of old religious customs and waited in "the illusions of hope." They became all too easily the servile classes of the Middle Ages and, "bowed with the weight of centuries," one of the tremendous problems of the whole modern period, as we shall see.

One Additional Element.—Certain of these diverse social and educational elements had intrinsic merit sufficient to compel the world to conserve and use them in the building of the future civilization. In addition to the Greek intellectualism and the Roman practicalism, mention must be made of the Hebrew contribution to the constructive forces that were making the world. We have already seen the development of this Hebrew element through its primitive

folkways up into its Oriental level of complete submersion in the written Law. The literalisms and moralisms of the Pharisee have passed into a term of reproach. But they are of one flesh with the intellectualisms of the Greek and the practicalisms of the Roman. This moralism had become completely institutionalized, with its penalties and punishments. It was "peculiar"; no other people of the Greco-Roman world held so tenaciously to their fixed system. And it was "natural"; it has outlived all changes of place and time. But it was mechanical, unpersonal, careless of the finer human goods. "You tithe your mint, your anise, and your cummin, but you neglect the weightier matters of the Law: Justice, Mercy, and Truth."

The Coalescence of These Characteristics.—The Hebrew element was, it is true, not much felt in the Roman world at large; it was local. But wherever it was felt it tended to the production of the same impersonal and absolute results as were produced by the intellectualism of Greek philosophy and the practicalism of Roman militaristic politics. But whether dominated by all these elements—intellectualism, practicalism, legalism—in combination or singly, human life in the last century B.C. and in the first century A.D. became overwhelmingly mechanical, juiceless, non-human. It was over-intellectualized, over-legalized, over-practicalized, over-civilized. The common individual was a useful machine and supposed to be without feeling or intelligence. Social interests had no intelligence in them; they represented only the mechanics of the system. The common work of the world was servile, untouched by any real intelligence. Intellectual interests had no real connection with the social world. Education stifled feeling, impulse, and emotion, and life itself lost all its genuine significance. The whole life of man comes to a routine. The race has lost its way; it has no way, no path ahead.

It has come to the end, to absolute system, to completion of all its tasks, to certainty and hence to hopelessness!

Certain Great Values in this Fixed Social Order.—Despite all that has been said, there were, of course, certain fundamental values in this world-empire which the world will not willingly see pass away. Obedience to the law is of the essence of character; discipline of the intellect is of the essence of education; discipline of the heart is of the essence of personal integrity. These great teachings from Rome, Greece, and Judea are permanent gains. Only, may they not be presented in ways that would make them quite as effective, without at the same time making them so unlovely, so objectionable? It was a grievous fault of the Greek intellectual life that it possessed no power after Socrates of making, or making place for, a new and finer social order. "With its lack of the idea of progress, it possessed no possibility of a thoroughgoing reconstruction, possessed no future and no hope."[1] It was a grievous fault of the Roman practical life that it had no imagination with which to grasp the variety and beauty of the life that it so relentlessly trampled under foot. Rome should conquer and save the world! But from what? From the very things, though Rome never knew it, that made life at all worth while! It was the grievous fault of the pharisaism of the Hebrews that it could live in the midst of a world of serene great beauties, the spiritual realities of the great prophets of its own past, and still could spend its energies and time in "straining at gnats." The mighty moral meanings of life had been sighted by the Greeks and the Hebrew prophets. Socrates had once lived, as had also Amos and Isaiah and Jeremiah; there had even once been a Republic, with its "tribunes of the people" in Rome. But liberty, freedom, intelligence, democracy, a greatly cre-

[1] Eucken: "Problem of Human Life," p. 126.

ative vision of the future—these are elusive and cannot be kept except by "eternal vigilance." We do not know this even yet. Hence we should not greatly wonder that in that distant age, with confusion behind it, with the tramp of mighty armies sounding through it, and with the rumors of still other confusions to come out of the wilderness of the North, men should cling to the machinery of life and let the spirit go!

It was a world in which education could merely follow the conventional round, the academic routine, the endless repetition of sentences without outlook of any kind. Children must be educated, just as the barbarian must be civilized. Hence in Greek lyceum, or Roman grammaticus, or Hebrew synagogue the child heard only: "Learn your lessons; repeat your sentences; practice your rules." What wonder that the tired Roman school-boy should draw, for the liberation of his weary mind, the picture of the ass working at the mill, inscribing under his drawing the brief legend: "Labor on, little ass, as I have labored, and may it profit you as much"!

What wonder that there grew up within that juiceless world the feeling that the significance of the world and of life had been lost; that the absolute system of the world, by means of which man was to have been saved, but added in some mysterious but certain way to the world's confusion; that the certainties of the age were a ghastly jest; that on this plain and certain way the race had yet wandered from the true way; that in the full blaze of this noonday literalism humanity was lost!

Says a modern writer:

"The whole age was filled with a sense of spiritual unrest. The rapidly increasing corruption of the ruling class, the glaring contrasts of luxury and misery, the insecurity of life and property, the sense of world-weariness which marked the passing

away of moral enthusiasms, all brought home to men the feeling that the world was growing old, and that some catastrophe was impending. The new sense of sin and evil was fast outgrowing the ability of the (most sincere thinkers) to cope with it. The ideal of virtue was felt by bitter experience to be beyond the reach of unaided human effort; some higher power must intervene to save us, if we are to reach salvation." [1]

A writer of the period describes the corruptions of the age, and suggests that the mind of the age had become "reprobate," "being filled with all unrighteousness, fornication, wickedness, covetousness, maliciousness; full of envy, murder, dissension, deceit, malignity; whisperers, backbiters, haters of God, despiteful, proud, boastful, inventors of evil things, disobedient to parents, without understanding, covenant breakers, without natural affection, implacable, unmerciful; who knowing . . . that they which commit such things are worthy of death, not only do the same, but have pleasure in them that do them." [2]

All this seems the inevitable result of an over-intellectual, over-mechanical organization of society. The feelings had been eliminated from the world; emotions were out of date. Yet the search for a "salvation" that could be approved by the intellect had resulted in the destruction of all that was finest in the older social orders. There must be some other interpretation of the meaning of life, or else life is lost in unspeakable degradation and the race is lost in the toils of its own devising: it has put a part of life for the whole of life and is sunken in a beastly materialism. Whence shall the possibility of escape, or salvation, come? That shall engage us in the next chapter.

[1] Rogers, "Student's History of Philosophy," pp. 171–3.
[2] Romans, Ch. I, vv. 28–32.

CHAPTER XIV

THE PROTEST OF PRIMITIVE CHRISTIANITY AGAINST THE CHARACTERISTICS OF GRECO-ROMAN-HEBREW CIVILIZATION

The Historic Roots of the New Movement.—A man named Socrates had once lived in Athens, teaching: "Men of Athens, I would persuade you, old and young alike, not to take thought for your persons or your properties, but first and chiefly to care about the greatest improvement of your souls. I tell you that virtue is not given by money, but that from virtue come money and every other good of man, public as well as private."[1]

A man named Amos had once lived in Judea, teaching: "Thus saith Jehovah, 'I hate, I despise your feasts, your conventional assemblies, your official music; but I would that justice might roll down as the waters and righteousness as a mighty stream.'"[2]

And even in Rome a man named Tiberius Gracchus had once lived to say: "The wild beasts of Italy have their dens, but the brave men who spill their blood for her are without homes or settled habitations. Their generals do but mock them when they exhort their men to fight for their sepulchers and the gods of their hearths; for among such numbers there is perhaps not one who has an ancestral altar. The private soldiers fight and die to advance the luxury of the great, and they are called masters of the world without having a sod to call their own."

Thus it will be seen that not always in Greece and Judea,

[1] Plato's, "The Apology."
[2] Amos, 3, ii–iv.

nor even in Rome, had the heartless voice of a mechanical civilization been dominant. Socrates had, indeed, attested his sincerity with his death; Amos had defied the authorities to molest him; Gracchus had dared the Senate to do its worst, and taken the penalty. But these incidents prove that there is something in humanity that is not accounted for in an age of intellectualisms, practicalisms, legalisms, and militarisms. Deep under the surface of such an age energies are buried that will yet come to light and life. A mechanical age must always lose its way, its soul, its very self; but the salvation that it needs will come, and it will come, it must come, from within. So primitive Christianity appeared.

The Nature of Primitive Christianity.—The Christian movement in its primitive aspects represents a distinct resurgence of life from its natural depths and sources, whatever those sources may be. It is of the nature of a genuine impulse—life, energy, feeling, emotion, purpose welling up from within, out of the individual, out of Man, out of the universe, overflowing the conventional channels of life and daring to live in ways that are not permitted by a machine-made age or civilization.

It is the rediscovery of the individual, lost and forgotten since Socrates in Athens, since Jeremiah in Judea, since the Gracchi in Rome. It is the restatement of an ancient hope that life is spirit, not flesh, soul, not machine, feeling and emotion, not bare intellect. It is the denial of the finality of a fixed and mechanical social order. It is the hope of a social order based on the inner and spiritual life and needs of society, an order in which the individual may find his own personal freedom as a member of a social fellowship. It gives the direct challenge to all forms of intellectualisms, practicalisms, legalisms, literalisms, and militarisms. Plato had said, "The world is made of ideas";

Jesus said, "Build your world out of love and service and sympathy." Roman militarism had said, "Buttress your liberties with forts, arsenals, and legions of soldiers"; Jesus said, "The truth alone can make you free." The Scribes and Pharisees had said, "Cursed is the man that knows not the Law"; Jesus said, "Love is the fulfillment of all law." In place of the philosopher, the moralist, or the soldier, Jesus sets up a little child and says, "Of such is the real social order of the future to be made." In all these things the founder of this movement seems to be saying: "Man is a part of the creative energy of the universe; he shall create his own moral order, his own spiritual universe in which to live. Local legalisms, barren civic formalisms, heartless militarisms, lifeless intellectualisms, all are wrong because they make men the toys of circumstances, victims of their own environments, slaves of their age, or of some dead past. But man is to master his circumstances, he is to overcome the degradations of his environment, he is to remake his age, he is to outlive the past."

Three Essential Elements.—In the message of primitive Christianity life seems to be made up of three main elements. First, instead of its being dependent upon legalistic systems of conduct, formal learning, or the doctrines of the books, life is to be spontaneous, welling up out of the springs of existence and expressing itself in love and service. Man has immediate access to the sources of inspiration; books are not necessary nor are special classes of men, though these may be of service in their proper relationships.

Second, men need truth. Truth is not a final thing, a complete system, closed and dogmatic. Truth is something to be everlastingly searched after, and life is in the activity of this search for the truth, not in the mere possession of

something found, some absolute value to be attained once for all.

Third, life moves onward, forward, not by the spinning of long and subtle arguments, but by the simple and beneficent processes of growth from within. "The kingdom of Heaven is like to a grain of mustard seed, which at first is the least of all seeds; but when it is grown, it becomes a mighty tree, filling the earth." The processes of growth can be trusted; these are more reliable for progress than institutions which are usually but remnants of old folkways.

On the psychological side primitive Christianity seems to be rooted deep in the primitive feelings, in the impulses and sympathies. It does not deny the intellectual. Indeed, a close examination will show that of all ancient attempts to get at the real meaning of life Christianity gives the most permanent basis for a doctrine of the intellectual life which will satisfy the psychology of our own times. It demands that the intellect shall be the servant of the more fundamental aspects of life, and that books and all other products of the intellectual life shall consent to minister to life, not attempt to dominate and control it.

On the social side Christianity is rooted deep in the belief advanced by Socrates that man is of the nature of the universe, not a fallen angel or a stranger in an evil world; that the universal good is within him, if it can have the chance it needs for growth; that the ultimate good of society is to be found in the socialized responsibility of the individual and in the continuous contribution of such individuals to the world's needs, this being of course in distinction from the doctrine of the Empire, that the final good of society is found in the fixed systems, doctrines, creeds, and institutions that have been developed to date and which are used as instruments for measuring the in-

dividual, for compelling his conformity and making him an acceptable fraction of a social whole. According to this more human outlook of primitive Christianity, individuals need to be helped to grow, not out of their impulses but by means of them, into lives of love and service and sympathy and the broadest humanity; and not apart from the world in special exercises and experiences, but in the very midst of the world's tasks and experiences.

Primitive Christianity and Institutionalism.—The doctrine of growth is, as we have seen, one of the central elements of this new movement. We have encountered this doctrine before, in a primitive form, in Socrates; we shall encounter it again, in more sophisticated form, in the modern world. Here we must note that this is the particular aspect of the movement that comes into severest conflict with current institutions. Perhaps the clearest way of expressing this conflict is by saying that all the way through the teaching of primitive Christianity the implication is plain that there is quite as much need of the salvation of institutions as of the salvation of individuals. Institutions need to be redeemed from their stagnation, their decadence, their assumptions of traditional authority to dominate and control all the life of Man! Institutions are necessary to life. Aristotle had caught some glimpse of this and reflected it in his saying that "only in the state does the individual achieve independence and completeness of life"; individuals must be saved from their casual and fleeting impulses and helped to reach the substantial and permanent levels of living. But as we have seen in earlier sections of this study, one of the most constant tendencies in human nature is the tendency toward habit and the acceptance of some more or less accidental level of the folkways as the final reality of the world. The Roman Empire was but a greatly glorified system of habit which demanded certain

developments of the individual and forbade other developments; individuals achieved certain freedoms within the Empire and were denied other freedoms. No level of habit, that is to say, no system of institutions can ever assure ultimate freedom. The lasting good of life is not found in any set of institutions, in any system of folkways or any level of custom, not even of "civilized" custom. Nor is it found in the opinions of the "wise men" whose lives have become organized into some partial world of habit. No, the lasting good of the world is a promise not of words, but of life itself in its endless renewals; it is found in the unspoiled nature of the little child. It is not the child that is the promise; it is the endless renewal of unhabituated life that is the promise, and this is the most fundamental criticism of institutionalism that the world knows. The hope of the world is not primarily in what the world has accumulated of the accomplishments of life; it is rather in what the world has yet to learn from the very nature of life itself as that is revealed in untutored measure in the endlessly renewing generations. Not institutions, but life itself, is the hope of the world.

The Redemption of Civilization.—We have seen in an earlier section that the institutionalism of many kinds in the Empire had tended to burden the world with the feeling that the race had lost its way and had fallen into the clutches of a mechanical social system which could boast of its intellectual life on the one hand, while it ignored its moral degeneration on the other. Contemporary religious writers describe this moral break in the unity of human life. We have noted one such description in a previous section. As a matter of fact, the universe itself seemed to have been riven into two rival realms, as in the Persian religious doctrines,—the realm of goodness, or light, and the realm of evil, or darkness. The one realm claimed to

be in possession of reason, intelligence, and to represent the organized system of society which Plato had described in such glowing terms; the other was the world of unreason, of evil and misery, that "outer darkness" from which Greek intellect had striven to release the race. These two worlds stood over against each other. Civilization claimed to be marching with the former, with resounding doctrines, stern laws, and invincible legions, but the latter seemed always to be hanging on the flanks of the other. Darkness seemed always about to swallow up the light, to overwhelm the forces of civilization and order. The defect in all the ancient civilizations lay in their limited outlooks. The ancient peoples never escaped from their primitive folkway characteristics. To the Jew, all the rest of the world was "gentile"; to the Greek, all else was "barbarian." It is true that occasionally there appeared for a moment a particular individual who rose above this narrower folkway acceptance of life. A Roman poet could say, "Nothing human lies outside my interest," but the Founder of Christianity seems to have been the first who actually attempted to live that doctrine, and there is some doubt as to whether he always maintained that ideal. He calls himself not the Son of Abraham, but the "Son of Man"; he claimed to be not a Jew, but a human being. Yet it is reported of him that he once said, "My mission is to none but the House of Israel." That may have been said for the purpose of disarming the suspicions of the Jews, however. At any rate, there was within his doctrines and his life the possibility of a genuine humanity, as there never was in the Greek thought or in the Roman social order. Hence there is more hope for humanity in the Christian doctrine than in the Greek. In fact, the mighty civilization developed by Greek reason into an exclusive social order must be saved, reconstituted, humanized by the sympathies and love that

lie at the heart of the Christian movement, if human history is to have any real future. Let us note how this is to be done.

Greek thought conceived a moral order of civilization that should be perfect, finished, complete; after Socrates, Greek thinking could not endure the thought of the unfinished, the incomplete. The moral and educational problem for the Greek, therefore, consisted in realizing this complete moral environment and in bringing men into harmonious relationships with it, so that their own lives should become as complete. Hence the task of "civilization" among the Greeks was, as we have already seen, primarily an intellectual one. *Knowledge* was what man needed to make him as complete as the moral order that was round about him. But this doctrine was based on the hypothesis that there is a fully developed and final moral order in the universe to which men may conform, to which they must conform if their lives are to be saved from incompleteness, lawlessness, and lower impulses.

Such a doctrine seems very plausible and even beautiful. But if we are to judge of the truth of an hypothesis by its workings in actual experience, this doctrine falls far short of the desirable. Such a fully developed moral order may exist, but if so, it is not even yet known to humanity; and if any moral order presents itself to men as the fully developed order of the universe, it can be assumed that it is not genuine. It is some old *folkway system,* some non-intelligent organization of customs of even more primitive life erecting itself into a final moral system and presenting itself as having absolute moral authority. But such a conception of life prevents a real civilization, for it turns actual intelligence backward into a formal obedience, a conformity to old fixed conditions. It is the most fundamental merit of the Christian doctrine that it gives to life

a forward look toward unrealized and, indeed, toward as yet unseen goals; it suggests that the task of life is not merely human conformity to a rigid system. Such conformity, following the letter of the law, kills the spirit of man. The task of life is the development of new and nobler social orders, the creation of new worlds of moral and spiritual values. Man is to be not merely conformative; he is to be creative; he is to share in the work of making the nobler worlds. And this requires something more fundamental than knowledge. It requires, first of all, *a new heart!* It requires that the individual shall find for his life a new direction. It demands and secures the release of new energies. In short, it gives to the soul of man a new inner life, and it converts the passive negations of the Greek conception of life into active and positive purposes, regenerating and exercising all the latent energies of the being. It is a new life surging up through the formal and artificial boundaries of the old conventional life and in its rich exuberance overturning old standards and motives, going forth to fight with all the "powers of darkness" for the mastery of the world, ready to die for the joy of the faith that is revealed in this new experience.

But in the second place, if man is to be creative in the moral world, he must learn a new use of knowledge and of his intelligence. Knowledge is not to bind him; it is to set him free. His intelligence is not for the purpose of building strong walls about him; it is to help him apply knowledge in the working out of the problems of life; it is to serve him in developing the successive stages of his creative progress toward freedom. True, not all of this was explicit in the teachings of Jesus. But it was all implicit therein, and the logic of the Christian movement pointed in just such direction and made the movement most dangerous to the established social and intellectual order.

Hence it is not to be wondered at that such a release of energy should be regarded with suspicion by all upholders of old social conditions whose privileges and honors were threatened by any essential social change. Especially is it easy to see why efforts were made to fight the new movement, to destroy it, to stamp it out. Its founder was put to death, its exponents persecuted, imprisoned, and killed. Yet all such efforts failed.

There remained, therefore, but one thing to do: these destructive, revolutionary energies must be drained off into formal and harmless channels and conventionalized into meaninglessness. Its living energies must be turned into barren theologisms, into dreary intellectualisms which could be made to take the place of and to subdue the old-time passionate energies of the movement. For "civilization must be saved" from this new destructive movement. "It interferes with our profits" was the reason given by the silversmiths of Ephesus for their determination to root it out.[1]

The methods used in "saving civilization" from the full influence of the movement will be set forth in the next section.

[1] The Acts, 19.

CHAPTER XV

CHRISTIANITY BECOMES HARMONIZED TO THE ABSOLUTE EMPIRE

We have seen the sort of world into which the protest of primitive Christianity came. Politically organized and controlled from Rome, intellectually dominated by the absolute metaphysics and the seemingly invincible logic of Greece, that world loomed ever larger through the centuries as a gigantic civilization-machine before which nothing weak could long endure. "A voice crying in the wilderness," how long should primitive Christianity be heard above the tumult and the shouting of the world? "A reed shaken by the wind," how long could it stand before the "progress of civilization"?

Forces that Compel Uniformity.—The message and spirit of primitive Christianity were so profoundly revolutionary that the authorities of the age were compelled to do one of two things: they must either confess civilization in the wrong and submit to the leadership of this "despised Nazarene," or they must put the leaders of the movement into postions where their influence could be safely controlled. Already the founder of the movement had met the fate of Socrates in Athens. But followers became too numerous to be dealt with in this summary manner, though great efforts were made in this direction. Of course institutions like the state may not willingly and freely declare themselves in the wrong. Hence but one course was open. The life and message of primitive Christianity had to be reckoned with. Here was a moral ideal of singular beauty

and purity, a type of life that made a wonderful appeal to a weary world. There was a real danger that this ideal might conquer the mighty fortress of civilization by the slow processes of individual conversion. Such fatal consequences must be guarded against; primitive Christianity must be moralized, systematized, intellectualized, institutionalized. It must be made to fit into the absolute system of the Empire; it must become subjected to Greek logical forms and to Roman political control. In this way alone could the dangers implicit in it be securely avoided.

The task was not difficult. Ideals must be kept pure; hence they must be stated in pure and final forms. Moral purposes must be protected from the contaminations of the world; hence there must be definite standards of conduct. Thinking must end in truth; hence there must be definite standards of "straight thinking," or orthodoxy. Hence, too, there must be authorized bodies of men who shall determine the purity of ideals, the standards of conduct, the tests of orthodoxy. All these things seem perfectly legitimate. But it is the most difficult of matters to determine when ideals, conduct, and thinking pass over from being the actual expression of an inner spirit and become merely mechanical conformity to external standards, forms, and rules. We shall have occasion to note this fact again and again. One age lives out of the seemingly boundless resources of its moral aspirations; this is life, indeed. But in its natural desire to make sure that the next age shall enjoy the same abundant life, it presses down upon that rising age standards of living, feeling, and thinking which come as purely external regulations to the younger age; and the older generations have never been able to understand the "rebelliousness" of the younger, or to see that what is "life" in one generation may be nothing but machinery in the next.

At any rate, and without going too far into the mere details of the matter, the Christian life gradually became moralized into rather definite practices. Rituals and ceremonials that could be used as tests of membership and fellowship came into being, creeds were gradually agreed upon, and before many generations had passed, i.e., early in the fourth century, all these matters had come under the control and the sanction of the political authorities. Christianity had become the accepted and acknowledged religion of the state. From this time forward, with slight reverses now and then, the prestige of the new movement grew rapidly, and its primitive moral vigor declined in a somewhat similar ratio.

Greek philosophy supplied the intellectual framework for the creeds and theologies that made it possible for the simple doctrines of early Christianity to become acceptable as the official religion of the world-empire. To be sure, this end was not won without many bitter conflicts. Greek learning was at first bitterly denounced by Christian leaders as being utterly opposed to the spirit of the new movement. But little by little it became apparent that Christian beliefs needed systematic organization and effective intellectual control. Now, while there were many things in Greek thought that were repugnant to the moral sense of the Christians, even the simple-minded followers of the movement came gradually to see that in this Greek thought there were two distinct elements, viz., its content element, and its logical element, its facts or principles, and the form in which those facts or principles were stated and related. The former, or ethical element, was the objectionable element; the latter, or logical element, could be separated from the former, and it was seen that this logical element partook of no share in the general objection to Greek thinking. This logical element was just the framework on

which Greek ethical notions were strung. The obvious question arises: Is it not possible to strip these objectionable ethical elements off the framework and use this same logical structure in the organization of the content of Christian emotion and belief? Such a procedure would serve two worthy ends: it would help to redeem a noble logic from ignoble uses, and it would give to the Christian elements the intellectual stability that they so sadly needed.

Results of These Processes.—Accordingly, little by little this new life lost its originality, its depth of emotion, its primitive assurances of living and growing truth, its fundamental reliance upon the processes of growth; it surrendered, on its official side, to the forces of the age. And though, deep under all officialisms, some real life always remains, primitive Christianity was lost to the world for a thousand years. Life was intellectualized into set creeds, with their tests and penalties. The ideal of truth as a social product, gradually developing through the ages in the moral strivings of the race, was lost once again, as in Greece of old, and in its place came the doctrine of a final system of truth, the "faith once delivered to the saints." Over and above the natural world of moral effort appears the "heavenly world," the abode of God and all pure spirits, the hope of the world-weary, the final refuge of the oppressed, the means of escape from the problems of life.

Beyond these developments we must note the growth of certain general philosophies of life whose purpose was to bring all the past cultures of the world, including Christianity, into one general harmony, with, of course, a Christian bias. Neoplatonism is the first of these attempts. But the problem is the task of the next thousand years, the task of the philosophers of the church—Augustine, the Scholastics, and finally Thomas Aquinas, the master of them all. The Platonic conception of an absolute system

underlies all these efforts and dominates their final outcome, though Platonic conceptions are not quite equal to the last exacting stage in the task.

Finally we must see that there was gradually growing up alongside all these efforts a great ecclesiastical organization, the church, which should be the outward and institutional embodiment of these absolute knowledges, standards, and ideals, the judge of orthodoxy, the conservator of standards of faith and practice, the eventual master of even the state in the domination of the world. Its structure gradually becomes hierarchical; it finds definite completion in the papacy, when its domination of the minds of men and its control of institutions and of human destinies become absolute.

In some such manner as this primitive Christianity came to abdicate its original social mission of stimulating the growth of the native impulses of goodness in the world of men, and it set up instead formal standards of living to which men must adhere before they could claim any of the benefits promised in the primitive "good news." This tendency was in evidence before the end of the first century. Jesus had preached a gospel of human salvation in the towns and cities of Galilee and even in Jerusalem. His follower, John, despairing of earthly cities and finding no hope for the race in human endeavors, pictured the hope of the world as residing in a "holy city," a "new Jerusalem" not to be built by men, but "coming down out of heaven from God made ready as a bride adorned for her husband." That is to say, the world was to be saved, but not by any means existing upon the earth. Still later, as conditions in the Empire became less secure, and especially as fear of the northern barbarians grew, the hope of any security in any sort of a city of the earth grew dim. To St. Augustine in the fifth century the whole hope of the

future passed from the earth; man's secure life was to be found only in an eventual "City of God" far from the turmoils of this world, "eternal in the heavens." This ideal of life dominates the imagination of the Middle Ages, as we shall see. The long struggle to win back belief in the reality of this world is of almost wholly modern origin. But its tenuous roots are to be found even in the Middle Ages. And one of those roots is traceable in the story of the rebuilding of cities as the habitations of men. Of this we shall see more later.

One further phase of the story remains to be told. The value of the individual, so bravely asserted by Jesus, was forgotten in the growth of religious politics and the machinery of officialdom. Primitive Christianity had seemed the charter of liberties of the individual soul. But the church became the official religious institution of the Empire, with an army at hand to make its authority sure. Under the mighty sweep of the imperial army, tribes were "converted" wholesale. A conquered nation might be driven by hundreds, or even thousands, through a river for baptism, and thus transformed "in the twinkling of an eye" from heathen into Christians. The church was thus inundated with the ignorant, who did not understand the significance of the movement. Its vital meaning for the individual was lost, and the world-weary individual became the victim of one more world-encompassing machine. Church and state joined hands to keep the individual within bounds, here and hereafter. Indeed, the church, delivering ultimate doctrines to men through its official channels from God himself, becomes the final arbiter of human happiness and hope and destiny. Even the state is subordinate to the church, as the left hand is subordinate to the right.

The church, or at least primitive Christianity, began as

an expression of an inner life which was slowly to spread until, like the tree growing from the grain of mustard seed, its branches should fill the whole earth. But this inner life was under quick necessity of relating itself to the hard logic of Greek thought and the iron rigor of Roman imperialism. The conflict was short and decisive. That inner life dissolved in forced submission to these mighty externalities. And all that remains of it is a memory that seems to make less unendurable the progress of that religio-political machine, Medieval civilization.

CHAPTER XVI

THE IRRUPTION OF NORTHERN BARBARISM INTO THIS GRECO-ROMAN-CHRISTIAN EMPIRE FROM THE THIRD TO THE SIXTH CENTURY

THE logic of experience is more effective than the logic of obscure ideals or the logic of an abstract argument. What primitive Christianity failed to accomplish through its ideals and its simple arguments was emphatically accomplished in the fourth and fifth centuries by the shock of barbarian invasion from the north. "The Greco-Roman Empire is not the last word in human life, in social organization, in political control, in general culture, in individual happiness; there are possibilities of individual and social development still unrealized, even undreamed by Greek philosophy, hidden in the unexplored future of humanity."

This barbarian challenge to civilization demonstrated even more. It called in question, distinctly, the finality of the processes by which primitive Christianity had itself become harmonized to the absolute structure and purpose of the Empire. To be sure, that question was not to be answered until a full thousand years had passed; but it was in the course of events and it remained within the current of history, appearing above the surface now and again, waiting the development of a more substantial basis of expression. But when the thousand years had passed it broke through the encompassing shell, the accumulated folkways, and changed the current of the world's life.

Nature of this Barbarian Protest.—The Roman Empire was approaching social and moral exhaustion, notwith-

standing the fact that the Christian element had been absorbed into its life and become the official religion. The causes were chiefly economic and political, the accumulation of decadent tendencies of centuries. Society had become quite completely stratified, from the imperial levels down to the peasant who had already become a serf, bound to the soil where he labored and changing masters as the land he tilled changed owners. By the fourth century the condition of these serfs had become the very limit of misery. They must pay their unfair landlords outrageous rents and, in addition, they paid heavy taxes to the Empire. In the reign of Diocletian they arose in bloody revolts against the upper classes in Gaul. The Empire was becoming as fixed in its structure as an Oriental despotism. It swarmed with tax-gatherers; it was said that "they who received taxes were more than they who paid them." In short, through economic and political unintelligence the old social and moral fiber of the Empire was destroyed. Rome, as Rome, had no further contribution to make to civilization.

The contrast between the virtues of the barbarians and the weaknesses of the Romans struck the age with vividness and force. But there was nothing to be done about it. The old empire had no real place in it for the strength of the new peoples. It is true that the Roman army was gradually reconstituted through the coming in of barbarian recruits, but the result was the Romanizing of the recruit, not the strengthening of the Roman. And that older civilization, now going to decay, was desperate before the influx of this new, primitive, and barbaric strength. Jerome, in the early years of the fifth century, writes:

> Who could believe that Rome, built upon the conquest of the whole world, would fall to the ground; that the mother herself would become the tomb of her peoples . . . How could the tale

be worthily told? How Rome has fought within her own bosom not for glory, but for preservation,—nay, how she has not even fought, but with gold and all her precious things has ransomed her life.[1]

Into this decadent world came the vigorous strength of the Barbarians.

"The settlement of the Teutonic tribes was not merely the introduction of a new set of ideas and institutions . . . it was the introduction of fresh blood and youthful mind —the muscle and the brain which in the future were to do the larger share of the world's work."[2]

Characteristics of the Teutonic Peoples.—"Fresh blood and youthful mind"—what may not these tremendous energies accomplish in political, economic, social, ethical, religious, and educational directions! These people brought with them three significant elements which were to be powerful components of the new civilization of the distant future. These three elements are:

(1) The fundamental value of the individual, as such, as opposed to the individual as an atom in a great politico-social system. The very genius of the Teutonic life is expressed here. Great state-machines may develop, but individual energy remains alive under the whole development, and in time the machine must reckon with this lasting energy of individual life and conscience. That this primitive factor has been perverted in certain modern Teutonic states does not affect the original fact.

(2) The assemblies of the people,—those popular gatherings which had become wrought into the very structure of the nature of these peoples. Out of these assemblies will come representative government, the actual control of the machinery of the state by the individuals who make up

[1] Robinson: "Readings in European History," Vol. I; p. 44f.
[2] Adams: "Civilization During the Middle Ages," Ch. V.

the state; and this will eventually mean the destruction of all absolute types of government. Democracy is bravely promised here.

(3) The attitude of mind that can accept law as a growing institution. Of course this is involved in the acceptance of the individual and in the existence of the popular assemblies. But not all peoples accept what is involved in some of their underlying principles—law as a living outgrowth of life itself! Out of this will come such developments as the English "Common Law," intelligence gradually becoming conscious of the conditions of life and adjusting itself to the demands of changing life and experience, and the whole structure of the American political conception of law as the gradual and constantly changing interpretation and organization of the relationships of social and industrial life. Intelligence is implied in this, intelligence as the active, critical, destructive, and constructive energy of mind by which the outgrown is pared away and room for the new growth is assured. It is the very genius of the civilization of the West as opposed to the stagnant absolutisms of the East, and of the West when it becomes careless.

The Question of the Future.—Now with all this almost passionate untamable sense of individuality, with their democratic assemblages of the whole people for the discussion and determination of public questions, and with their willingness to meet the new conditions with new developments of laws, these Teutonic peoples met the existent civilization of the South. That meeting meant ruin of the thousand years of toil: "The result of an immigration which may be counted by hundreds of thousands is—that all the land is waste"! But it meant more than that, at least in the long run, after the first great joy of destruction had passed. To the simple Teutons the civilization of the

South possessed a certain preëxistent quality. Carelessly they destroyed much that had value. How could it be otherwise? But for all that they were filled with a deep wonder, even reverence, in the presence of its mighty structures, its marvelous devices, its massive pomp and circumstance. Something of the structure of old Roman social order and political life remained. The church was taken over speedily by the conquerors; Roman law had been codified at Constantinople and was thus saved for the future of the world-civilization; the scientific knowledge of the Greeks was not wholly lost or forgotten; the practical arts of the South, developed far beyond the levels of Teutonic knowledge, were preserved in the industries of the common people which went on still, although the world was being turned upside down.

Thus these mighty types of energy and life met each other—the Roman, organized, fixed, substantial, massive, impressive, with the suggestion of eternality, of preëxistence about it; the Teutonic, fluid, crude, unorganized, unsubstantial, unconscious of its strength, but strong beyond the strength of age: "fresh blood and youthful mind." The latter, untutored, almost pathetically submits itself to the instruction of the former, and for a thousand years, more or less, steadily and readily sits at the feet of the wisdom of the South. And the older civilization, haughty in its consciousness of a mighty past, feels confident that, though conquered in battles and overrun of territory, its intellectual and spiritual superiority still promise eventual victory. The anarchy of the barbarian must yield at last to the order and control of the fixed system of the Empire.

But is it fanciful to connect this irruption of fresh, even barbaric, energy with the energies of primitive Christianity, with the simple social logic of Socrates? Each of these movements entered a protest against the acceptance

of a "closed world," a world of fixed, unchanging institutions, an absolute domain of "eternal ideas." Each seems to reveal the existence of something living in human life, something more permanent than institutions, more fundamental than ideas, stronger than the mighty machinery of a world-empire.

If this be so, we shall find herein the clue to the gathering of forces in the great medieval period. On the one hand we shall find the gathering of the systematized, the organized energies of the world; the traditional, the customary, the habitual tendencies; the political systems, the religious organizations, the social stratifications; and around all these the protecting care of a great philosophical development, the Platonic doctrine of the absolute order of the world which, accepted as the official philosophy of the church, will attempt to control with ruthless exactness the life of the individual both here and hereafter. And for its greater assurance this absolute control of life and destiny will organize an elaborate system of education within which all anarchic impulses, all individual energies, all originalities, will be carefully denied. Thus will the "larger folkways of medievalism" come gradually to completion.

On the other hand we shall find occasional expression of that deeper energy of the world. The individuality, the democracy, the progressiveness of the Teuton, the emotional values of primitive Christianity, the social intelligence urged by Socrates, have not vanished from the earth; they are germinating beneath the soil of old civilizations, gaining strength for the conflicts that will surely come. Occasionally during these "dark ages" they try to measure strength with the forces of control, but a thousand years must intervene, a thousand years of schooling, of discipline, before they are really ready for the conflict.

But considering both aspects of this situation the question of the future arises: In the days when Roman civilization was being buffeted by Teutonic barbarism, where was the hope of the future, the hope of civilization? Was it back with the older culture, the older civilization? Or was it with the new energy, with the "fresh blood and youthful mind"?

And where, in any generation, is the supreme hope of the future? In the fixed institutions of that generation, in the finished ideals and ideas of the times, in the orthodox systems? Or in the energies, the impulses, the aspirations, the enthusiasms of the "fresh blood and youthful mind"? In educational efforts, where is the real hope of the future? In the school as a fixed institution, with its conventional tasks, its routine methods, and its accepted folkways? Or in the children of the new generation who come to call in question all conventional tasks, all routine methods, all accepted folkways?

The history of education knows no more important question than this. Indeed, it may turn out that the history of education is just the endless effort to answer this question, now in this way, now in that. For the world seems not long contented with either sort of answer. At any rate, however strange the contrast may appear, the great world-argument gathers through the Middle Ages, ready to develop into the modern world-problem. On the one hand is the principle of growth represented by such seemingly disparate factors as the work of Socrates in individual experience, the movement of primitive Christianity in the world's moral life, and the destructive effects of the barbaric invasions; on the other hand, the mechanisms of institutionalism, whether in church, in state, in the social and industrial order, or in the pedantic thinking of the age. These are the antagonists in the slowly-gathering

world-argument. Growth versus finished social mechanism! Development versus final folkway! Attention, innovation, invention versus habit and tradition! This shall be a battle worthy the attention of the ages.

CHAPTER XVII

THE COMPLETION OF THE LARGER FOLKWAYS: "MEDIEVALISM"

We have seen how Plato, caught in the drift of events that marked the period of disintegration of Greek political and social life, proposed to his age the magnificent hypothesis of an eternal world of ideas, the real world, changeless behind all changes in the world of experience, preëxistent, the form or pattern of all earthly things, determining and controlling the nature and destiny of all human activities and institutions. We have seen how this conception fitted into the political structure of the Roman Empire in its march toward world-control; how out of this union of the Greek idea and the Roman political structure the all-inclusive Greco-Roman Empire came into being—an absolute political empire which gradually absorbed all lesser political efforts into itself, an absolute intellectual empire which gradually triumphed over all protests and became the arbiter of all beliefs. We have seen how primitive Christianity was conquered and remade to fit the absolute intellectualism of this empire, although something of its primitive rebelliousness remained hidden under the surface of its outward conformings. And finally we have seen how the invading Teuton, who came destroying all before him, remained to wonder, to revere, and to sit modestly at the feet of this old system for a thousand years, even though he still kept his innermost nature concealed under the robes of his curiosity and his reverence.

We have now to face this period of a thousand years of

conflict between order and disorder, between the established, though somewhat mutilated, forms of a preëxistent civilization and the undisciplined energies of many primitive peoples who seem to pour through the centuries in an endless stream. We must consider how this old system of universal order gradually "harmonized" and "absorbed" all these diverse and discordant elements until it reached at length a magnificent culmination,—religious, political, economic, moral, social, and intellectual,—in the mighty thirteenth century and gave complete form to the most splendid organization of this one of the two fundamental interpretations of human life that the world has ever seen or is likely to see. But the story is long and the details endless; hence we must give the outlines only, emphasizing the important forces and tendencies.

The Uncertainties of the Middle Ages.—If proof were needed of our earlier proposal that "the race is educated by its experiences," such proof could be found in overwhelming measure in the story of the Middle Ages. It was a long period of terrible uncertainties. Consider these typical "uncertainties":

(a) The Invasions. Beginning with the coming of the Huns from the East, there was almost no century for a thousand years that did not know the terrors of threatened or actual invasion. The Huns, the various Germanic tribes, the Saracens, Hungarians, Northmen and Normans, Seljukian Turks, Tartars and Mongols of the Golden Horde, Ottoman Turks,—they follow fast on each other's heels, some to destroy and run away, some to remain and to help to build.

> On helm and harness rings the Saxon hammer,
> Through Cimbric forest roars the Norseman's song,
> And loud amid the universal clamor
> O'er distant deserts sounds the Tartar gong.

It is not to be wondered at that out of these experiences some still echo the prayer taught in the midst of terror: "From the fury of the Northmen, O Lord, deliver us!"[1]

(b) Hungers and famines. Agriculture was still extremely primitive and with the great masses of the people hunger was constant, while actual famines were not unknown. The peasant was "bound to the wheel of labor" and had to take the brunt of every untoward condition, including the lessening of food supplies. Burdened with a social structure expressing a certain Platonic completeness, "what to him were Plato and the swing of Pleiades?"

(c) Diseases and epidemics. Modern ideas of sanitation were unknown. The minglings of the peoples developed conditions for contagions, and epidemics of various kinds always menaced the peoples and occasionally swept away great numbers of the population. For example, the "Black Death" swept away two-thirds of the population in certain provinces of France in the years 1349–50; but this was "only the most terrible of many plagues which devastated Europe in the Middle Ages."

(d) Social unrest. Growing out of the uncertainties of common life, the hungers and famines, the pestilence and contagions, and the endless economic miseries, the Middle Ages experienced many actual or threatened "revolts" of the peasantry. As early as during the reign of Diocletian (284–305 A.D.) these revolts were known, and all through the Middle Ages they continued at intervals. The most famous and most effective, coming as they did in the very dawn of the modern period, were the rising of the "Jacquerie" in France (1358) and the "Peasants' Revolt" under John Ball and Wat Tyler in England (1381).

(e) Lesser and greater warfares. The feudal system was ostensibly a system established in the interest of peace

[1] Robinson, "Readings in European History," Vol. I; Ch. VIII.

and social order, but both within and without it tended to the promotion of disorder. The overlord must fight continuously to keep the upper hand of his vassals within the system, and continuous fighting went on between the various overlords and between the various racial and national groups. Efforts were made to secure peace by such means as the "Truce of God."

(f) Fears of the supernatural. Credulity was the chief characteristic of the mental life of the period, and constantly renewed prophecies of the imminent "end of the world" stirred, thrilled, and in a sense paralyzed the activities of the successive generations; but they seemed to leave each new generation as credulous as its predecessor. In some real measure these supernatural fears led to the enthusiasms that attended the Crusades, and the endless promises of absolution and the like played into and fed these credulous enthusiasms.

(g) Intellectual uncertainties. Though in the earlier centuries of the Middle Ages credulity, and therefore intellectual certainty, was the characteristic, in the later centuries came a gradual disillusionment, especially among the Teutonic peoples of the North. This was the promise of the eventual development of science. Little by little this intellectual uncertainty gnawed at the foundation of the Medieval system until it broke through. But for centuries this intellectual uncertainty was the possession of a very few.

The Certainties and Securities of the Period.—In the struggles which the old social order of the South waged against these desperate uncertainties of the Middle Ages, real principles were at stake—social order, established and secure, versus anarchy, savagery, "the return into the brute." There could have been no continuous fight against such overwhelming odds had not the old civilization

of the South been sustained by fundamental "certainties" and securities. What were some of these?

(a) The church and the religious organization. Here was a practical retreat from the turbulence of the times. The churches, monasteries, convents, and hermitages preserved old learnings, kept alive the love of knowledge, nurtured human hopes in quiet, improved modes of industry, arbitrated quarrels, and conserved the promise of a nobler age to be.

(b) The hope of eternal security. The church could offer one other motive for standing by the older order: it held the keys to the gates of eternity, that real world (Plato's heaven, now Christianized into Augustine's "City of God") which was to be the "happy home" of all the faithful, the "fatherland" of the soul. This belief found expression in many hymns, e.g., "Jerusalem my Happy Home."

(c) The feudal system. For a time this system seemed to promise complete security and order, and its development in England did secure probably as great degree of order as the diverse conditions of the age could afford. But on the whole, as we have seen, the feudal system was but a temporary expedient, productive of mighty evils with which modern social hopes have had to wage continuous warfare.

(d) The survivals of Roman law. Deeper than the expedients of the feudal system, though not fully realized or understood, lay the fundamentals of social order in the conceptions of Roman law. This was now, of course, an absolute system of law, not generally operative, but codified and complete; but a complete system was what the Middle Ages wanted.

(e) A great literature. The central element here was the Bible. But certain other materials were orthodox,

especially the writings of the "fathers," and these helped to sustain the courage of the age, though of course very little of this was in the possession of the common people.

(f) The conception of authority. The whole trend of history to the height of the Middle Ages emphasized the doctrine of one "lasting, universal, supreme authority to which the civilized world owed obedience."

The Growth of the Medieval System.—Medievalism is the culmination of many lines of development and their convergence into a superficially consistent social and intellectual whole. In the midst of the terrific uncertainties of the whole period the longing for order became the most persistent human motive. Augustine had set forth the ideal in his impressive descriptions of the "City of God." The gradual developments of centralized authority and control, the building of permanent cities as centers of civilization, the adjustment of social conditions so that fixed status became more universal, the subordination of all critical intelligence to the eternal realities of the faith—all these details, and many more, show the universal longings for order. It was indeed an age of endless contrasts in every aspect of existence. But the souls of the noblest spirits longed and worked for order, a permanent and final order. This is what Greek intellect had tried to create; it was what Roman law had stood for; it was the deep expectation of Hebrew piety. And now, throughout this period, all logical powers, all pious hopes, and all practical administrative activities were turned in this same direction.

But the Platonic conception of the world failed to complete what it had begun. Rather, that diluted doctrine known as Neoplatonism, which had largely taken the place of the original, failed to carry out the promise; or, it may be, there was too much of Socrates in Plato. At any rate,

the unrest of the eleventh and twelfth centuries, with their Crusades, their contacts with many ancient peoples and types of civilization, especially that of the Arabs, with the growth of national aims and the development of commercial activities—these tendencies proved too much for the strength of the Platonic doctrine, and civilization was near to disintegration. But a new tool was at hand. Aristotle, lost for more than a thousand years, Aristotle "the conservative and the definer of what is," came to the rescue of the distracted social world. Brought back to the West by the Saracens, Aristotle first frightened the leaders of the church; he seemed all that a philosopher of Christendom should not be. But when it became apparent, through further study of his words, that Aristotle had no prejudices for or against any particular doctrine or creed, that he was primarily a logic, a way of looking at the world, the church turned to him with gratitude. Aristotle became the absolute intellectual dictator of the culminating period of the Middle Ages. He set the bounds to human thinking. Hitherto there had been no recognized authority in the intellectual world. Plato was never an authority, but only a dominating influence. Hence, up to this time mental life had had some free play. "By establishing now the supreme authority of Aristotle in every sphere to which reasoning applies—the natural world as well as the metaphysical—and by interpreting Aristotle in her own way, a tool was at hand for holding reason in check, without at the same time denying it its rights. Aristotle was himself identical with reason, not to be denied or questioned. Even in science, the question was, not what does nature reveal, but what does Aristotle say; and when science began to emerge, the authority of the philosopher was actively used to check its growth." [1]

[1] Rogers: "A Student's History of Philosophy," p. 215.

Educational Developments of the Middle Ages.—No fundamental scientific progress was made in a thousand years of such life; but educational developments of profound significance for all subsequent ages occurred. These, too, we must note in outline in order to properly appreciate their scope.

(a) Various "revivals of learning." Though learning languished, it never really perished. Revivals took place under Julian (361–363), under Charlemagne (771–814), and in the thirteenth century as a part of the culmination of the developing folkways of the Middle Ages.

(b) Monastic influences in education. But the real preservation of the learning of the world was due to the influences of the monastic life. This was a universal characteristic of the whole period from the fourth to the thirteenth century and later. Monasteries, with all their influences and accessories, good, bad, and neutral, were found from the north of Scotland to the far Orient; teachers and clergy and "brothers" were found in desert and forest and city street; and almost all sorts of doctrines, not utterly unorthodox, came from the monasteries. The social and educational ideal of the monasteries was an ascetic discipline—fasting, scourging the flesh, reducing the bodily wants to a minimum, destroying the natural appetites, the discipline of the "carnal man" for the sake of growth in moral and spiritual power. The vows of the monastic were chastity, poverty, and obedience, thus denying the significance of the family, industry, and political institutions. Monastic life was completely dominated by the "rules of St. Benedict." Work and study made up the day's routine. Study became centralized in the monasteries. They became the schools, the teacher-training institutions, the universities. Books were copied here and libraries were slowly built up. They were the re-

treats of the scholars and the centers of practically all educational effort.

(c) The "Seven Liberal Arts." The learning of the past came to the Middle Ages in an organized form, worked over by the scholars of the very late classical period and called "The Seven Liberal Arts." These "arts" included the old *trivium* (grammar, rhetoric, and dialectic) and the *quadrivium* (arithmetic, geometry, music, and astronomy). Of course these terms included a wider content than they do at present.[1]

(d) Scholasticism. The methods and forms of civilization in these ages came, as we have seen, from the old intellectual and institutional life of the Greeks and Romans; but the materials of the new social development were found in the tremendous diversities of the races and peoples of the age. The task of organizing all these strange, new materials into the old forms, of cramming the old categories with these new contents, of filling the "old bottles" with this "new wine," was no easy task; and it called for the development of the highest powers of subtle dialectic. "Scholasticism" is the outcome. In ordinary school histories scholastic dialectic is usually ridiculed, being portrayed as concerned with such amusing subjects as "How many angels can stand on the point of a needle?" But in reality the scholastic development is the actual organization of all the intellectual forces of the old order in preparation for the life and death struggle with the new order that is to come: and there is nothing amusing about getting ready for a life and death struggle, though there is something very exhilarating about it.

(e) The universities. Scholastic discussions centered gradually at certain rather strategic places. Bologna in the south, under the leadership of Irnerius, became the most

[1] See Abelson: "The Seven Liberal Arts."

famous center of legal learning (about 1100–1130). Paris, under the inspiration of the rather unorthodox teachings of Abelard, became the chief center of theological learning and discussion (about the middle of the twelfth century); and before the end of the thirteenth century Europe had fourteen universities. The universities soon became the possessors of a monopoly of the teaching function; and the question may well be raised whether their chief function was the development of knowledge, or the control of knowledge in the interest of existing conditions. The fact that the universities developed at those places and under those conditions where great social conflicts were impending seems to indicate that their major function was the control of learning in the interest of established conditions.

(f) Chivalry. Warfare tore young men from their life in settled society and sent them out to the freedom of the battle and the march. Especially did the Crusades tend to liberate young men from all the constraints that the established social system of Europe had so carefully developed. Young soldiers, returning from contacts with the institutions of other lands and with years of freedom from conventional restraints, could prove and did prove to be very real dangers to the established social order. Hence society must educate its future soldiers to implicit belief in the established social order and an acceptance of that social order as the final organization of civilization before they set out on their travels. The educational system of "chivalry" accomplished this. Young men destined to be knights were completely habituated to the existent order, and they swore by holy vows to help maintain the system, despite all disillusioning experiences elsewhere.

Thus we can see that through all the obvious educational institutions and influences of the age men were being habituated to the accepted social order. Education was the

accomplished "handmaiden" of civilization and men were trained to "fit into the system." Through industry, civic life, religious institution, and educational effort there ran one single motive: the salvation of civilization is in the conformity of the individual; hence all educational aims center in the processes that produce conformity.

The Culmination of the Middle Ages.—But there is another aspect of the matter that needs to be noted. Not merely is the salvation of civilization secured by the conformity of the individual, but it is in this way alone that the individual comes to have any real being. The individual has no value or significance in himself. Here, just as in the primitive folkways, he gets his value and significance from his membership in the organized community. He gets his citizenship from the state, his morality from the social tradition, his religion from the church, and his intelligence from the school. By himself he is nothingness. "Filthy rags," fit only to be thrown upon the refuse heap: this is the orthodox doctrine.

This absolute system of the Middle Ages, which reaches its culmination in the great politico-religious organization of the thirteenth century, which finds its most complete statement in the *Summa Theologiae* of Thomas Aquinas[1]

[1] The work of Thomas, the "Angelical Doctor," illustrates as nothing else can the sublime heights of faith which the age reached. Catholic scholars look up to him as the final authority in all matters of medieval thought. Prof. Walsh, in his "Greatest of the Centuries" (Page 281), quotes Father Vaughn as follows: "The 'Summa Theologica' is a mighty synthesis, thrown into technical and scientific form, of the Catholic traditions of East and West, of the infallible dicta of the Sacred Page, and of the most enlightened conclusions of human reason, gathered from the soaring intuitions of the Academy (Platonic) and the rigid severity of the Lyceum (Aristotelian). Its author was a man endowed with the characteristic notes of the three great Fathers of Greek Philosophy: he possessed the intellectual honesty and precision of Socrates, the analytic keenness of Aristotle, and that yearning after wisdom and light which

(1227–1274), its graphic presentation in the vision of Dante, and which is an all-inclusive world based on the principles of Aristotle, is really deeply rooted in one aspect of the moral and spiritual needs of humanity. In an age of endless uncertainties man must find some security upon which he can rest habitually, even thoughtlessly, while he is grappling with the immediate practical problems about him. This Medieval statement of life is so realistic (Aristotle is the philosopher of the existent) that it is securely fortified against the assaults of either brute force (for men will gladly die for it) or petty criticism. For humanity must catch sight of something essentially larger, nobler, more worth while, before this conception can be abandoned, and petty criticism can never bring that finer world. No, this conception of life as a great, absolute system of thinking, feeling, and acting cannot be ignored or lightly swept aside. It is, of course, of the nature of the primitive folkways; it is built of habit, custom, tradition, and institution, all bound together by the explicit logic of Aristotle, which is the implicit logic of the folkways. It persists in

was the distinguishing mark of 'Plato the divine,' and which has been one of the essential conditions of the highest intuition of religion."

To this surpassing greatness of faith of the thirteenth century many scholars of all faiths have offered testimony. Mr. Henry Osborn Taylor, in his "Medieval Mind," (Vol. 1, p. 13) says: "The peoples of western Europe, from the eighth to the thirteenth century, passed through a homogeneous growth, and evolved a spirit different from that of any other period of history—a spirit which stood in awe before its monitors human and divine, and deemed that knowledge was to be drawn from the storehouse of the past; which seemed to rely on everything except its sin-crushed self, and trusted everything except its senses; which in the actual looked for the ideal, in the concrete saw the symbol, in the earthly Church beheld the heavenly, and in fleshly joys discerned the devil's lures; which lived in the unreconciled opposition between the lust and vain-glory of earth and the attainment of salvation; which felt life's terror and its pitifulness, and its eternal hope; around which waved concrete infinitudes, and over which flamed the terror of darkness and the Judgment Day."

ceremonials, rituals, beliefs, creeds, doctrines, and scriptures which soothe and satisfy the soul; it offers a comprehensive life to humanity; it answers all questions that may be rightly asked; it promises all that the universe has to give as reward for faithfulness and obedience; and, when the intellectual implications of the system have been fully considered, we are convinced that here is a philosophy of life and existence from which only the most daring and brilliant, or the most reckless and foolhardy, can ever hope to escape. History has many truthful and fateful stories to tell of the inevitable outcome of all efforts to escape. Any who would attack the permanence or validity of this medieval interpretation of life must come prepared to exhibit that eternal vigilance which is supposed to be the price of all liberties.

It is this mighty structure of ordered and completed civilization which stands as the background of all modern movements. The whole of the "modern world" struggle is an effort to escape from the iron implications of this medieval system into greater freedom along all those lines that seem to be humanly valuable and worthy of effort. From these accomplished heights of social, religious, political, and intellectual organization we must now turn to a survey of the processes by which humanity has contrived to escape, in some small measure, into another sort of world.

PART IV

THE GROWTH OF THE MODERN WORLD

CHAPTER XVIII

THE ROOTS OF THE MODERN UNDERNEATH THE MEDIEVAL

Medievalism not the Final Statement of Life.—The mighty structure of medievalism seems almost the final denial of those old impulses toward freedom, individuality, and progressive growth which we have seen in such individuals as Socrates, such internal protests as primitive Christianity, such racial irruptions as the Teutonic invasions. But not so. Under all the political and social magnificence, the religious authority, and the intellectual subtlety of medievalism there were deep-lying energies which maintained their continuity of life with the original impulses of the race; and these were yet to be heard from. In the working out of that medieval world-inclusive structure (as its builders supposed it to be), many elements were overlooked, ignored as useless, despised as harmless, or veneered over and considered safely out of the way. But those vital elements but wait their time. Medievalism is not the final statement of the significance of human life. We must now attend while life, the tireless worker, now with the aid of intelligence attempts to rebuild the structure bit by bit, and now with the aid of passion and revolution tears down a majestic wing in one wild orgy of rebellious energy, leaving to the long future the task of providing the new structure more nearly fitted to the needs of men. Goethe says somewhere, "Law is mighty, but mightier is need," and that tells the story of the revolt from the majestic finality of medievalism. Human need cannot be answered forever under any perfected and growthless sys-

tem. With the risk of losing all, humanity still dares soon or late to try the unknown ways, to make the great adventure!

The Roots of the Modern World.—What were the energies that remained from all the protests of the past, dormant through all these centuries, waiting their time? Medievalism is, in its very perfection, struck with inner decay; living energies, promises of a new world, shoot up through the ruins of the old. What are these new-old forces of life?

The significance of the individual, basic factor in the doctrine of Socrates, boldly recognized in primitive Christianity, fundamental in the democracy of the Teutons, is never completely covered up. It appears as a sort of inconsistent element in the Neoplatonic philosophy, is conserved in the thought and practices of the mystics of the Middle Ages, and crops out here and there in the speculations of the nonconformist philosophers. As we come to the end of the medieval period individuals begin to appear, to stand out; and the period of transition brings us many such—men who dare to stand for the new impulses, exploration, invention, innovation, science, an intelligent outlook upon life and the world. Even Platonism itself fails the builders of the larger folkways, just because Plato could not quite deny the place of the individual in the social world.

The significance of primitive Christianity seemed all but completely covered up, both in practice and in speculation; but the energies of revolt inherent in that earliest expression of Christianity were not lost. Primitive sects were in existence all through the period; heretics constantly called in question the validity of accepted dogmas; the speculative mystics, like Scotus Erigena, even restate that old revolutionary proposition of the founder of Christian-

ity that growth, not finished system, is the nature of the world. Reformers appear long before the Reformation, e.g., Wycliffe in England and Huss in Bohemia; even St. Augustine, in many ways the official philosopher of the early Middle Ages, is divided in his allegiance to the finished and absolute universe, so much so, indeed, that he becomes the philosophical mainstay of the Reformation. Indeed, running all through the Middle Ages something of the spirit of revolt is to be found. Even as members of a perfect system which offers them all things for their faithful obedience, men grow tired of endless passivity and receptivity, of intelligenceless acquiescence in tradition and perfection. Primitive energies and impulses cannot be forever ignored or denied.

The primitive racial characteristics of the "new and exuberant" peoples, though veneered over with studied culture and "morality," cannot be destroyed. Deep under the soil they remain largely unaffected, unchanged, ready to germinate into diverse nationalities at the earliest possible moment. And, indeed, racial instincts could not vanish in an age when new racial conflicts were constantly occurring. We have already seen how the age was one of constant invasions and incursions. These crises kept alive the deeper racial antagonisms, despite the theoretical "unity of Christendom," and helped to lay the foundations for the great intellectual awakening of later centuries.

Characteristic Expression of these Energies in the Middle Ages.—The common life of the people, despite the feudal control, showed certain aspects of freedom. The towns were refuges of escaped serfs, working-places of the freed populations, the homes of the growing "Third Estate" whose development was eventually to mark the overthrow of the power of the clergy and the nobility. In many towns and cities democratic tendencies were striving

within the people; free towns, self-governing communes, were developing. Here, too, corporate guilds of the workers grew and flourished, with their tremendous significance for free workmanship and free intelligence. Occasionally the miseries of the poor touched the heart of an ecclesiastic, and he dared to voice his indignation. And more than one heretic poet dared to denounce the selfishness of the clergy who fawned upon the rich and forgot the poor.[1]

The centuries of the Middle Ages constituted a long period of discipline in work and in subordination, but also in training for freedom under the larger and finer civilization of the future. Obedience does not always assure complete and final subordination; it may prepare for the personal self-control of a larger democratic social order.

Alongside this life of the common people we must note what has been called the "medieval dilemma," which played an insidious part in the disillusionment of the people and in the eventual releasing of energies for the modern struggle. This "dilemma" arose out of the fact that while this earthly life must go on individually and in the race, being pushed on by impulses and energies deeper than thought, yet the medieval ideal was an expression of the worthlessness of this life itself. "One must live and work; but the only real value in life is getting out of life into the heavenly existence." Such a plain contradiction of values must, and does, sooner or later become conscious; its final result is disillusionment.

Another expression of these energies of progress is seen in the life on the frontiers of Europe. All through the Middle Ages there were men who, like Arthur,

> moving everywhere,
> Cleared the dark places, and let in the law,
> And broke the bandit holds and cleansed the land.

[1] See Robinson's "Readings in European History," Vol. I; Ch. XVII.

But the law they let in was not always the law of the empire; more frequently it was the "law of necessity." For the great problem of the frontiers is (as we have seen in the whole history of America): Shall civilization grow up everywhere in conformity with a scheme handed down from the past, from the old centers of settled life; must everything fit into the old patterns? Or shall men be free to use, under new conditions, the new energies released, the new patterns suggested by the new conditions, the new intelligence developed by the new situations? This question was obviously the most crucial of all those that arose. We shall have occasion to consider its implications more fully in a later section, and we may leave it here.

A third expression of this energy of the times is seen in the mingling of the peoples of all known continents. The contacts of Europeans with other races, as well as among themselves, the very processes of making Europeans (for Asiatics and Africans were making themselves over into Europeans all through this period), the explorations of occasional restless individuals, the extension of commerce through the great East, and especially the expanding or horizon, interest, and knowledge through the experiences of the Crusades—all these items show how far from extinct were the primitive impulses of the race.

We may indicate by one illustration the profound influence of these contacts and minglings of the peoples, though the illustration presents, perhaps, the most noteworthy case. In 732 A.D. the advance of the Saracens into Central Europe by way of Spain was stopped at Tours, in Gaul. Turned back upon themselves, these cultured Mohammedans settled down to the occupancy of Spain, making Cordova one of the four great centers of the Moslem Empire, the other three being Damascus in Syria, Bagdad on the Tigris River, and Cairo on the Nile. Here, in an empire

stretching "from the river Indus to the Pillars of Hercules, the same religion was professed, the same tongue spoken, the same laws obeyed." It may be remarked without serious exaggeration that this empire was the home of the finest civilization of the age. At any rate, it has been said that "from the eighth to the twelfth century the ancient world knew but two civilizations,—that of Byzantium and that of the Arabs"; and of these the Arab civilization was much more energetic, much more intelligent. Passing by the advances which they made in agriculture, manufacturing, and commerce, we may note that they built a university in Cairo which at one time had twelve thousand students, and that their great library in Spain is said to have contained four hundred thousand manuscript volumes in the tenth century. They gave the world its first impulse toward mathematics since the Alexandrian Age, practically inventing algebra, improving trigonometry, and introducing the Arabic system of notation to take the place of the old and clumsy Roman system. In many other lines they were prepared to teach the Christian civilization north of the Pyrenees. But our special interest at this time arises from the fact that they gave back to Europe the philosophy of Aristotle, lost for a thousand years but treasured by these Oriental scholars and now thrown by them into the current of discussion out of which was to come the intellectual life of Western Europe. It is true that the actual result of this return of Aristotle was reactionary; he helped to give the finishing touches of perfection and completeness to the structure of medievalism. But the coming of the Mohammedans is an excellent illustration of that "cross-fertilization of cultures" by which the world is saved from its provincialisms, from its tendencies toward the levels of stagnate custom.

Summary.—So through all these experiences, through

the resurgence of those primitive energies and impulses which dared to battle at length with the perfect system of medievalism, through the growth of knowledge of other peoples and lands, through the development of a middle class or Third Estate in the cities, with special privileges and with a growing sense of independence, through the life on the frontiers where strong men were fighting great battles with strong forces, making such adjustments of conditions as were possible under the circumstances—through centuries of these experiences there came about a gradual disillusionment of the barbarians of the North as to the superiority of the civilization of the South; there came a gradual suspicion of the ultimate reality of a scheme of life which, for the great masses of the people, subordinated all the concerns of this world to the hope of another; there came the freeing of energies with which to do the work of the great unknown future.

Before turning to that larger work, however, we must pause a moment to consider some of the foreshadowings of that coming modern world in the long experience of the Middle Ages. The modern world has come to its ideals and its tasks through revolutions; but the roots of even a revolutionary age may be found in the soils of antecedent centuries, and the great revolution may be preceded by lesser expressions of the same creative spirit.

CHAPTER XIX

SOME FORESHADOWINGS OF THE MODERN WORLD IN THE MEDIEVAL

We have noted that from one point of view the problem of the Middle Ages was the conflict between order and disorder, between established results of civilization and the anarchy of constant invasion and migration (Chapter XVII). But from another, and perhaps more valid point of view, we have now to see that the problem of that period was the conflict between the fundamental social forces that tend toward progress and the forces that make for fixed systems and social stagnation. We have briefly followed the gradual development of the mighty structure of social order from the days when Plato interpreted Greek social disintegration in such ways as to make it still help toward a higher and more absolute social system; we have seen it culminate under the logic of Aristotle and the intellectual leadership of Thomas Aquinas in that majestic and all-inclusive statement of the significance of human life which is generally called "medievalism," one of the two fundamental interpretations of life that the world has worked out to date. We have seen, also, that underneath the surface of the medieval system the "roots of progress" were still alive, promising eventual growth of a very different kind of world (Chapter XVIII). We must now note how, even in this very period and despite all the efforts of the "system," many evidences of life and many promises of the new order came to light. As was natural and inevitable, each of these evidences appears in the form of a struggle

with existing conditions and institutions. We shall briefly note some of these "struggles."

(a) The Rise of the Nations as against the Empire and the Church.—The efforts of the Middle Ages were directed to the development and complete organization of "Christendom," a holy state which should include and control all the diverse nationalities of the world under one central authority. But the effort to smother the racial instincts of the many peoples who now occupy Europe proved futile; the folkway traditions of these various races were too deeply rooted in their very personal and social natures to be thus easily covered over and destroyed. And, indeed, nothing could be imagined that would have made the human race more uninteresting than the success of this plan of reducing all peoples to the same drab level of conformity to a program conceived in Rome. Emotionally, intellectually, educationally, the loss would have been immeasurable. But it was a movement that could not succeed. England gradually assumed her own career; and though her story is closely inwrought with the story of the continental states, yet after 449 Anglo-Saxon diversity made certain the development of an independent racial, social, and political order.

The same may be said of France from and after the beginning of the work of the stronger Capetian kings, for example, Louis VI (1108–1137). In a sense it may even be said that the very events that brought about the breaking-up of the empire of Charlemagne,—racial struggles between the Franks and the Germans,—promised an eventual nation of the Franks. The whole story of this development is, of course, too long to be told in this place. But this much must be recognized: Deep under the surface of the "conformities" of the Middle Ages, racial and national traits were preserved against the day when the

conflict between these diverse traits and the centralizing tendencies might be waged on somewhat even terms. The rise of nations has meant almost endless warfares; but it has preserved the great diversities of life from destruction and given us the picturesque social and political life of the present. And not even the horrors of war can make us forget these values.

(b) The Struggles between the Cities and the Feudal Monarchies.—After the destruction of the Roman towns by the invading barbarians Europe knew little of the old town life until about the tenth century. Then, in the midst of the Hungarian invasions, Henry the First of Germany (919–936), known usually as "Henry the Fowler," gave great impetus to town building by setting up many fortified places in which, he decreed, one out of every nine peasants should dwell for the purpose of storing up one-third of the annual harvest of the other eight. Henry became known to history as the "Builder of Cities," and town life became again a recognized type of living. Little by little the cities developed; new types of industry grew. Cities became centers of intelligence, centers of aspiration, centers of organization in the long struggle for human freedom. They were given special charters by some of the national kings. They learned to play fast and loose with feudal and national monarchs in their determination to become free. They became centers of commerce, with all that that implies; and, of course, they became the refuges of all the oppressed, the homes of all workers who were not immediately attached to the soil. The struggles between the cities and the central authorities is one of the most definite of all the struggles of the period for freedom and human rights.[1]

In this connection we must note also the struggle be-

[1] Robinson: "Readings in European History," Vol. I, Ch. XVIII.

tween the feudal organization of industry (mostly agricultural) and the rising industries of the towns, especially as represented by the merchant and craft gilds. The development of the varied industries represented by these gilds is one of the most important evidences of the nonconformist nature of much of the life of the Middle Ages.

(c) The Struggles between Heretic Sects and the Church.—Here again we come upon a long story. We have seen how all the efforts of the established order were directed to the task of bringing primitive Christianity under control and harmonizing it with the institutional attitudes of the Roman Empire. The task seemed to have been rather successfully accomplished. But that was only on the surface. "Heretic" sects abounded all through the Middle Ages. We cannot go into this in detail. We may merely call attention to the Waldensians and the Albigensians as representative heretical groups who steadfastly refused to submit to the demands of centralized religious authorities and who maintained their heretical integrity until the days of religious intolerance had passed away.[1]

(d) The Development of Mysticism.—As a religious experience this tended to undermine the authority of the church. Mysticism was an individual experience. In the very nature of things it could not be standardized or controlled. It offered the means for bringing in all sorts of innovations. Yet it was so distinctively religious and real that it could not be absolutely denied as a normal phase of the Christian's life.

(e) Gradual Rise of Vernacular Languages and the Growth of National Literatures.—Nothing more fully shows the developmental forces that were at work under all the unprogressive systems of the age than this. Language cannot be bound by any standards. Latin became

[1] Id.: Ch. XVII.

corrupted, interwoven with many other tongues, differentiated. The Romance and other tongues arose little by little, in mongrel dialects or in more pure fashion. Along with this growth of vernacular languages came the development of indigenous literatures, the work of singers, poets, balladists in many lands. A new life was in germination under all the smooth structure of medievalism, a life that breathed free air, dared new, strange flights of fancy, and promised, in good time, to come forth into full expression.

(f) The Struggle between the Ecclesiastical and Secular Ideals of Life.—The Crusades had been expected to bring about overwhelming enthusiasms for the church and her service. But they had turned out quite otherwise. The political results were negligible; the religious results were practically nothing; but the secular results were many. The life of Europe was shaken to its foundations. Dormant intellects were stirred by contacts with many peoples and strange customs, and provincialisms gave place to the beginnings of a type of cosmopolitanism. National rivalries, rising out of the competition of national types, helped to speed on the development of separate nationalities. Commercial activities were immensely strengthened by the realization of the wealth of the East, and by the knowledge of new varieties of merchandise, especially certain luxuries of Eastern growth or manufacture. The Crusades were great undertakings, requiring the transportation of large armies and the furnishing of immense supplies of foods. The sense of accomplishment was acquired in these undertakings, rather than the sense of dependence upon the church. So much so was this the case that that particular form of education called "Chivalry" was largely developed as a means of offsetting the disintegrating effects of this period of the Crusades. Yet, upon the older

religious and political institutions, despite all efforts, a secular conception of life was coming into existence.

(g) The Undercurrents of Philosophy.—Aside from the theological philosophizing of the Middle Ages, the thinkers of the age were largely divided into two great groups, with later a third, or mediating group. These two primary groups were the realists and the nominalists. The main problem in dispute was as to the reality of "general ideas." This question was inherited from Plato. At first sight its importance does not seem to be very great. But our real comprehension of the Middle Ages here gets its test. If we apprehend the significance of this conflict between these two "schools," we shall be able to feel that we have gained a real insight into the problems of the period; if we do not understand this conflict, we have failed to grasp the significance of the age. The realists believed that general ideas were real; the nominalists held that general ideas were merely names, convenient fictions, useful for purposes of discussion but having no objective reality. For example, in the sentence "The horse is a noble animal," horse does not refer to some particular animal, but to a class of animals. As such, the nominalists claimed that "horse" had no existence, that it was merely a word. The realists, on the other hand, claimed that such general ideas were the most real of all existences, more real than any particular horse, which was, indeed, but an imperfect shadow of the eternal reality, the idea "horse." As stated above, this seems like a very unimportant distinction; and it may seem ridiculous that just this conflict marks the intellectual crisis of the Middle Ages, while its practical decision carries tremendous significance for the whole future development of society. Yet this is the case, and its understanding is most important. Let us see!

From the centers of authority, like Rome, traditional

leaders were attempting to dictate the whole course of civilization, keeping it within proper bounds of traditionalism, imposing upon it the established forms of the past, gradually hemming it in and bounding it with orthodox programs or approved ideas. Whence came these ideas? They were revealed to prophets and teachers and leaders of old, so it was claimed. These are the eternal ideas, the final forms of social order. These are the realities of the world; and when the world shall have been completely organized into these ideal forms, we shall at last have reached the real world, the world of Plato's ideas.

Out on the frontiers, both geographical and intellectual, on the other hand, men were extending the boundaries of civilization, cutting down the wilderness, letting in the light, setting up such homes and neighborhoods as were possible under the conditions and asking only that they be permitted to go ahead in the great task of transforming the wilderness into farms and cities. Here, under such conditions, these old traditions hampered the work of making a world; these "eternal ideas" stood in the way of doing the tasks; a "preëxistent" social order made actual social orders impossible. This being the case, the man on the frontiers had to be a "nominalist." He held that such general ideas as "the church" or "the empire" were mere names, having no reality that he need be concerned about; he held his task to be that of cutting down the wilderness, and if any "general idea" should interfere with the accomplishment of that task, then so much the worse for the idea!

Now from the standpoint of the central authorities such acts and such doctrines were dangerous; they threatened the authority of the institutions which existed under those general ideas. More than that, if the progressive activities of the frontiersman and the nominalistic doctrine of the

unorthodox philosopher should prevail, the whole structure of medieval thought and the whole social order would be in danger of passing away. So we can see that this conflict between realism and nominalism was profoundly important. It was really a discussion of this great social question: "May social order be allowed to go ahead with its pressing tasks out on the frontiers under such guidance as its own intelligence can develop there, under the conditions that exist; or must all social development be determined in accordance with preëxistent programs, be organized from some authoritative center, be controlled by traditional conceptions and imposed upon local conditions by arbitrary authority, whether they fit or not?" The nominalist insisted on the former program, the realist on the latter. It was a struggle between two great social programs, rather than a mere philosophizing. And in the long run the decision was rendered by events, rather than by any intellectual tribunal. The work of civilization on the frontiers went on despite all disputes. The Platonic influence failed, and the extreme form of realism lost its grip. The Saracens brought new forms of learning into Europe; among these new forms was mathematics, a new tool for breaking down old prejudices. The Crusades developed great military enterprises; the undertaking of engineering projects, such as the building of castles, became common. "Impossible" things were being done. Intellectual activities were "in the air." Aristotle had come to light, too; and while his first influence must be counted in favor of the great structure of medievalism, yet his final influence counted the other way, since, as the "philosopher of the existent," he had to recognize that what was going on on the frontiers was real and must be accepted as such. Thus the intellectual foundations of medievalism crumbled.

In place of both the realism of the traditional authori-

ties and the nominalism of the frontiers, there arose, however, a new theory based largely on Aristotle and called conceptualism. According to this theory, general ideas are not objectively real, but they are much more than mere names; they are ways of thinking similarities, and thus for purposes of organizing thought they are thoroughly valid, but not for purposes of coercion. This allowed larger measures of freedom for social action, while keeping some place for the knowledge of the past. But it forecast the end of medievalism as an absolute system and at the same time, by criticising the more extreme demands of nominalism, which asked for the complete freedom of the "frontier" from all old controls, it showed that no age can become complete by cutting itself off entirely from the past, that each age needs the discipline of its impulses that comes from contacts and conflicts with the accomplishments of the past.

Other Important Developments.—The invention of printing, dating in the form of "block books" from the fourteenth century and in the form of movable types from the fifteenth, gave tremendous impetus to the spread of knowledge and afforded the greatest aid in the intellectual awakening which was so soon to take place.

The introduction of gunpowder illustrates in an interesting way the attitude of the modern period as opposed to the medieval attitude. The problem of security and quiet in the days of petty feudal warfare had brought about the building of great castles, often utterly impregnable to the weapons and offensive measures of the times. Castle-building was thus the answer of medievalism to that particular phase of the disorder of the age; it was an absolute and final answer, as befitted the age. But gunpowder made the castle impossible as a place of residence; it blew down the walls, wrecked the foundations, and set up once more

the old problem of finding security. The Middle Ages looked for absolute answers in which the intelligence could rest; the modern world looks for problems which can worthily engage the intelligence.

It were a long task to relate the whole story of these implicit tendencies of the Middle Ages and their explicit formulations and expressions. Perhaps enough has been set forth to show that all through the period internal fires of life and light existed, largely unsuspected, but always unquenchable. At any rate, we have seen how commerce, industry, and even war (the occupations of Plato's two lower classes) became the training-fields of the very impulses that medievalism attempted to deny and defeat in its absolute system. To be sure, as we have seen in a former chapter, medievalism recognized the common base impulses of life, but only to the extent of offering expiation for them. It is of the very irony of fate, therefore, that these despised impulses should find such constant exercise in the vocations of the serf, the vassal, the merchant, and the soldier, thus gradually training and disciplining a mighty strength for future expression and control.

We have seen, too, how these activities found expression in distinctive literatures,—ballads and songs of the troubadours, etc. A new life was surging up through individuals and they could not be silent. They were accomplishing work despite obstacles. Their sense of accomplishment was largely nurtured by the functioning of the very impulses which the great systems had put under the ban, and this feeling of work done, of enterprises accomplished, gave the nominalists actual grounds in their own experiences for fighting the tyranny of institutions and the demands of the realists.

For the age had many "frontiers." War, commerce, and the industry by which men live, as well as the wilder-

nesses of the North and West, were "frontiers." Men were schooled in actual tasks; they lived actual experiences; they braved actual conditions; they laid those "spectres of the mind"—the ideas of the realists—and won out. They made this world signify something worth while and laid the foundations for the Renaissance, an age that should move over completely to the field of the impulses, interests, and experiences of this world.

We must now note how these deep impulse-fires break forth into the first great burning and glowing of the modern world. For the conflict between the established order and these deep-lying forces of progress must now become open, definite, and inextinguishable.

CHAPTER XX

THE FIRST FULL OUTBURST OF THE MODERN WORLD SPIRIT

The Middle Ages as a Germination Period.—In the structure of medievalism man, the individual, counted for nothing, as we have seen. Whatever worth he possessed at any time came *to* him, because of his membership in a great system, social, political, religious, and educational. That was the *theory*. But the *facts* were different, at least in some respects, for there were men all through this period who dared to question this fundamental theory, who dared to assert the superiority of the individual to the institutions within which he lived. We come now to a time when such assertions become the characteristic of the age.

But what shall save this new age of criticism and disillusionment from the sophisms of that period of the breakdown of the folkways in Athens? This shall save it; that for a thousand years men have been disciplined and buffeted and "battered with the shocks of doom to shape and use." Energies have been slowly gathering, impulses slowly ripening, purposes gradually maturing. The very handing over of the common life to the discipline of work prepared the way. The outcome can be foreseen somewhat; history has taught some lessons. The Renaissance is not an *accident*. It is the flowering of the human spirit after long germination and growth in the soil of fundamental experience; it is proof that humanity possesses something more fundamental than the power of thinking, viz., the impulses of life and growth; it is the expression of the hypothesis that man, growing by institutions, must yet out-

grow soon or late the institutions of his own construction; it is demonstration of the proposition that humanity grows weary of the perfect and turns gladly to the imperfect, the incomplete, wherein room for larger life and fuller growth can be found.

The Character of the Renaissance.—The Middle Ages, despairing of this world as essentially evil, had undertaken to construct another world beside this one, as we may say, wherein certain ideal forces were to be found and certain desirable characteristics were to be cultivated. Men were to give up their energies, their initiatives, their originalities, their own wills, their personal desires, and in exchange they were to receive infinite rewards, eternal recompenses in some other, later, unworldly world. But the Renaissance turned boldly away from this conception. Men must give over this waiting until a future condition for their chance to live; they must strike out into the midst of life here and now. "The development and unlimited increase" of the present life became the goal. Revolt from the dreariness of scholasticism; denial of the ideal of asceticism; a new enthusiasm, unknown since the Greeks, for beauty and nature; the opening out of a larger universe, of vaster majesties and expansive spaces, yet capable of becoming related to man as his personal home; man as the master of his own existence, not the pawn of a great System-maker; the awakening of dormant and latent energies; the liberation of forces chained for a thousand years; a great, restless, tumultuous, forward movement which liberates new aspects of the human spirit and develops new strengths as it moves—all this was the Renaissance!

The Renaissance in Italy.—For many reasons Italy became the birthplace of this modern spirit. The cities of the North of Italy, of a population mingled of blood from both Latin and Teutonic civilizations, had long been cen-

ters of political and intellectual unrest. Economic and commercial rivalries had developed a certain strain of individualism which had given trouble to the authorities often enough. This attitude of individualism had flowered into great literature; Dante, Petrarch, and Boccaccio had given gradually developing expression to the new life that was to call the old in question. These all lived in the fourteenth century. Petrarch, especially, had opened the very floodgates of the hidden life of the Middle Ages; he was the first of genuinely *modern* writers. He reveals the whole gamut of human passion,—aspiration, ideal, and suffering, —analysing the self not as immortal soul, but as the subject of a wonderful range of experiences having human meanings and values. Whatever this rebirth may have meant in other lands, in other times, in Italy it meant something profoundly human, profoundly personal, internal, expansive, revolutionary. Three phases of this new, expanding life must be noted here, especially by way of contrast with the narrow world of medievalism.

First, there emerged here in Italy, as we have briefly noted, a new world of the *emotions,* as opposed to the dry and formal intellectualism of medievalism. Now, as never before, reality seems to exist in the immediate experiences, the feelings and emotions of life, especially those which are unusually vivid; and those who have found their way into this new experience revel in the beauty of the world, in the poetry of nature, in the rich and varied life of the senses. When we set this expression of life over against the *official emotions* and perfected standards of the old order, we see how far the modern age was going astray from beaten paths.

Second, there emerged a new *social* world, as opposed to the institutionally perfect social order of the Middle Ages. This was the world of human relationships and fellowships

which came as the natural development out of the new recognition of emotion and feeling. The sense of *humanity,* the sympathies of common life, the romantic loves and tender friendships of the modern times began to appear, to be accepted as proper to the world. Life became rich in its opportunities for the development of these social relationships, and a sort of "heaven-on-this-earth" conception seemed to take the place of that now somewhat uncertain "Heaven" of the medieval promise.

Third, there emerged a new *physical* world, the world of common nature in place of that world of base nature, in opposition to which the ideals of medievalism found their setting. Nature to the medievalist was hard, harsh, soulless, unless, indeed, it was tenanted by those dark spirits which lent their aid to the magicians with their "black arts." Nature was evil, something to be escaped from, a weight that dragged the soul in the mire, the "body of death." But in the rebirth of the human spirit something of the old Greek emotion attached itself to nature; nature became the setting of human experience, the field for man's life-work, the home of his spirit. Out of this new feeling toward nature comes the whole development of modern science,—man's power of control over the energies of the universe,—as well as the whole development of the new practical and artistic life of the modern world.

The "Revival of Learning."—But such new experiences of feeling, of social intercourse, and of a friendly nature overwhelmed man as soon as the first swift rush of joy was over. The medieval spirit of fear of all things earthly will intrude. Men find themselves in the state of mind of the child who has run away from school for a joyful, forgetful holiday far from books and lessons in the deep and cool recesses of the spring woods, but who must explain things at the end of the day. After all, are these new ex-

periences real? Is beauty a proper ideal? May humanity be happy? When the ideals of "other-worldliness" are given up in order that men may indulge themselves in the temporary experiences of the senses, the feelings, and emotions, hard, cold, unyielding habit comes back at length and stands like an accusing schoolmaster, demanding: "What have you to say for yourselves; why shall not punishment be pronounced upon you?" And the whole structure of beauty and freedom seems about to fall to pieces about the truants.

And these new experiences, so varied, so rich in color, so redolent of the world of humanity and nature, so expressive of the pent-up energies and the stifled emotions of the thousand buried years, must justify themselves as being truly human, i.e., as ministering to genuinely human developments; must submit to the criticism that will pare away their excesses; must consent to that larger fulfilment of which they are admittedly but the first faint promise.

And where shall they turn for this justification, this criticism, this suggestion as to the larger fulfilment of these incipient experiences? Is there in human history any justification for these human hopes? If so, where? Where else but in those original fountains of natural living, those original sources of artistic criticism, in that life which first joined beauty and knowledge into a perfect practice,—in Greece herself? As the wise school-child, returning home after the stolen holiday to meet the chidings of the adult world, appeals from those chidings to the memories of youth, so this age of the Renaissance appealed from the prudent maxims of an over-intellectualized age to the memories of that age's childhood, to the childhood of the world. "Greece shall justify us in these new experiences. If they be overdone, Greece shall teach us how to criticise away their exaggerations; if they fall short of complete-

ness, Greece shall teach us how to fulfill our lives along this rediscovered way of life." So the great search for the culture-materials of the Greeks began and went on apace and out of these experiences emerged a *new antiquity*. The barren abstractions of Aristotle passed into oblivion, save in the official philosophies. In their place came the overflowing richness of life in the poets of the morning of the world, the first "humanists." The whole wealth of classical culture gradually dawned upon the age, answering the deepest needs of these rebellious, hopeful minds. The Renaissance was a revolt against a state of mind. It bred a new state of mind, which was at first naturally timorous and doubtful of its own reality and validity, but it found refuge, justification, criticism, and fulfilment in the restored world of primitive joy and beauty of the Greeks.

Here, as nowhere else in the history of education or culture, the significance of the *classics* appears. The Greek classics are the full expression of a life that had grown almost completely human within the rather narrow world of the Greek city-state. The classics did not produce that Greek life; they expressed it, criticised it, justified it, enriched it, fulfilled it, and gave it to the world of after time. So these classics did not produce the Renaissance; that lies deep in the undercurrents of life and experience, as we have seen. But once the age had caught a glimpse of human joy and natural beauty, it needed the support and the criticism of other experiences, of other ages; its own particular experiences must be universalized. It must be freed from the invidious opinion of the Middle Ages that particular experiences are unreal and unsafe, and it must be made to meet even the demands of the logic of Aristotle that that which is to be depended upon as real must be shown to be, or to have been, the experience of some other human being, some other group or age. The classics prove themselves

really worth while, the finest educational materials the world knows, when they are thus used to support, to criticise, to fulfill, to universalize a mood, an experience, which otherwise would die of starvation or become impossible through undisciplined excesses. The age of the great humanists in Italy is one of the great educational periods of the world. The hungry soul of the race, starved for a thousand years or fed on the husk of dry theological discussion, came to this new feast of life and beauty with almost terrifying avidity. Men came face to face with the fundamental realities of experience; never again would they go back to the old position of subordination to the machinery of a system, at least not completely.

Educational Attitude of the Renaissance.—The education of the Middle Ages had been as unified as its comprehensive social structure. Its materials were the careful gathering of the ages, selected to effect one certain end—the instruction of the soul for Heaven. Its methods were as certain and as effective; the Aristotelian position that the way to know anything is to go to work and learn it was the basic principle. These conceptions seemed all dissolved as unrealities in the bright light of this new day. That old world could be *known* by the simple expedient of *learning* it. In its place has come a new world, a world of feeling, a world that cannot be *known* in the same way, a world that must be *felt*. That is to say, the Renaissance has intimations of new worlds of experience, rather than exact or complete realization of them. But if these new worlds cannot be known, how can the rising generation be *educated?* Does not education consist in filling the mind with knowledge? We have already seen how the age itself was fed on the lavish bounty of the Greeks. We have noted that the Renaissance exhibited three aspects of the new world, each of which was eventually to become the

basis of a clamorous program of education. These three aspects were the inner world of the emotions, the world of social relationships, and the world of physical nature. The first of these found its nourishment, as we have seen, in the Greek materials; the second will find its materials and its expression in the larger contacts with men in all phases of experience; the third will come to flower and fruition in the growing physical sciences. With these rich but still largely unknown worlds before the age, three educational avenues were thus more or less vaguely apparent: first, into the still unrealized treasures of antiquity; second, into the broadening realms of the social world; third, into the utterly unsuspected fields of nature. Each of these lines of development will, as we shall see, yield its rich fruitage for the enlargement of human life, or, failing this, become a burden for the modern world to bear.

Meanwhile we must not forget that the whole emphasis of life has changed from reliance upon the hopes of another world, with whatever of mighty machinery may be necessary to make sure of the attainment of that world, to a profound sense of the worth of the present world. Life has assumed an almost pagan character. Even the leaders of the church read their Greek poets more than their Bible. The zest for the human and the beautiful has found matchless expression in the arts. This inner spirit of revolt, the spirit of the Renaissance, has flowered into all forms of art, especially sculpture, architecture, and painting. The energies of this southern rebirth will overflow, or be met with like expression, in many another land, especially in the North where the slower life will take it up at a later time, but will keep it the more surely. Here is a fire of new energy that shall not be lightly quenched. Here is a light that shall yet lighten the whole world. Here is an inspira-

tion that shall quicken the whole race. Here are life and growth and beauty and hope—all that the world can want of promise, but containing much, also, that the world little suspects in the way of individual and social problems and realizations.

Yet here is the mightiest task of the ages ahead of this age. It was a tremendous accomplishment to build the structure of the Middle Ages which should house the majestic spirit of medievalism. But here is the task of building a world which shall be forever open to the light, forever advancing with the new day, forever hopeful of unrealized experiences. It will be not a finished world housing a perfect system and ideal, but a living and growing world, the home of a living and growing ideal. It will take all the deepest hopes of the ages, wrought out through political, social, industrial, and religious struggles, to make this ideal root itself deep in the profoundest meanings of life; it will take all the contacts and conflicts of the social ages to save it from superficiality; it will take all the unforeseen developments of all the sciences to give it place in the world of accepted intelligence. And age by age will the race despair of its realization and seek to retreat into the old sureties of medievalism, or into some modified aspects of that old system, making itself believe that it has found a nobler refuge. Democracy, liberty, freedom of thinking, access to the uncontrolled sources of truth—all are involved; and in this struggle for unrealizable ideals men will often, in the words of Gilbert Murray, "lose their nerve." Yet not permanently nor for long. That which was begun in the Renaissance as a sort of romantic holiday of the spirit has become the world's most serious and unending task, the struggle for democracy whose price is eternal vigilance. In this struggle education, the application

of intelligence in constructive ways, is central. And we must see more fully now the educational significance and outcome of these profound experiences.

But before we take up the educational significances of these phases of the Renaissance we must turn to a general survey along a number of lines of the ways in which this spirit of the new age worked itself out in the modern world. These lines of survey will give us the needed background for the discussion of the educational developments of the period since the Renaissance.

CHAPTER XXI

BIRTH-THROES OF THE MODERN WORLD

The Renaissance was after all little more than a great resurgence of old repressed phases of human feeling and emotion. This rebirth was most important, but mostly as a prelude to other more exacting developments. For humanity is something more than feeling and emotion. Indeed, feelings and emotions must come to be something other than themselves if they are not to be blown away by some cold wind out of the past. They must find their true meaning in the wider and more permanent phases of human life. They must penetrate into the world of institutions and social attitudes. They must help to remake the conventional social and intellectual attitudes.

Buried under more than a thousand years of historical accumulation that freer world of feeling and hope and achievement came to life but slowly. The first outburst of the feelings was refreshingly sudden. But the complete realization of this promise was the slow task of the centuries. The old religious institutions must be made to feel these reconstructive forces, and must come to a new expression. The old scholastic intellect must be shaken out of its routines and catch step with the feelings of the new world. The old political absolutisms must be destroyed and the world must have a "new birth of freedom." The old feudal tyrannies in industry must be abolished and the age of free contract must come in. The whole modern period is a period of "bringing to birth."

We must take time here to note four phases of these "birth-throes of the modern world."

A. RELIGIOUS REBIRTH: THE REFORMATION

Relation of the Reformation to the Renaissance.—The Renaissance brought the promise and to a large extent the reality of a new emotional freedom to the race. Men's fears could no longer be controlled by the threats of death and punishment in another world; the race escaped from this degradation of life and began to look about for other avenues of action and other phases of freedom. The whole religious life was most closely bound up in the old medieval system; and the realization of freedom in the inner world of poetry and beauty found its first possibility of advance in the effort to make the religious experience a life of the same complete freedom. The logic of the Middle Ages had worked for a fixed and unified type of life and experience; the emotional overflow of the Renaissance had found exquisite pleasure in multiplicity and variety of types; the Reformation opens the way to a great diversity and variety of types in the religious field. The Reformation appears in the North, because of the different interests of the people there. In the South of Europe religion was something of an esthetic affair, a sort of adornment of the life. The new birth was therefore esthetic, rather than ethical. In the North, among the Teutonic peoples, religion was an ethical concern, a matter of most fundamental significance. Hence the primary revolt in the North was the religious one.

Primary Nature of the Reformation.—The Reformation was another resurgence of primitive life from its original sources. The Middle Ages had taught that men live by institutional relationships; that is to say, an individual has no real existence apart from his membership in the institu-

tions of the world. Hence outside the church individuals had no ultimate significance, no worth, no goodness. "The good man has become good through his partaking of the goodness that is in the Church." But it was the primary doctrine of the Reformation, of Luther, that "The good man shall live by his own faith"; that is to say, "There is goodness which is not in any institution, which is antecedent to all institutions. All men have access to this Goodness, and they can live without the Church." In its purest form this is, of course, the statement of primitive Christianity come to life again. It denies that institutional membership is the assurance of the goodness of the individual. It even asserts that institutions themselves need to be saved from their stagnation and inertia and corruptions. In its original form it goes so far as to say that institutions must answer at the bar of individual judgment for their right to control the individual. It asserts that religion is not something *given* to men from a great storehouse, like Plato's "Heaven of Reality"; rather religion is something inherent in the very nature of man, requiring the experiences of life to call it forth, to give it room. At any rate, Luther does not hesitate to declare that his religious nature and his religious destiny are both *safe*, even though he cuts himself off from the authorized channel of supply. Indeed he rather asserts that both these values are safer outside the church than inside it, under existing conditions.

The Dilemma of Protestantism.—Luther did not fully see, though before he died he felt it acutely enough, the terrible dilemma into which the Reformation plunged the religious man. That dilemma is as follows: The medieval church had provided universal standards of doctrine, emotion, and conduct for its members. There was no need of intelligence, of course, on the part of the member. Im-

plicit obedience was all that was required of him, and if he made mistakes through ignorance, these could be compounded with the authorities. But when the individual steps out upon his own faith, his own religious nature, his own goodness, he finds himself in a world of individual uncertainties. The full implication of this individual right of judgment leads to complete destruction of all set standards; we are back in the days of the Sophists, where one man's opinion is just as good as another's. What shall be done? The authority of the church, of the papacy, is overthrown; shall every man become his own all-sufficient authority?

On this question Luther himself recanted. If we admit that every man shall become his own authority, the only escape from the pitfall of the Sophists is in the development of reason in every individual, the proposal of Socrates. Luther had at first found it possible to accept this authority of reason, calling it "something divine"; but when he realized how that involved the right of every ignorant, undisciplined individual to set up his own opinions as having full authority with the learned conclusions of men who had actually spent years in getting to the heart of a matter, he came to the sad conclusion that "the more subtle and acute is reason, the more poisonous a beast it is." There was left, therefore, for Luther and men like himself,—men who had thrown over the authority of the church, yet who could not accept the final authority of reason,—nothing but the authority of the Bible. The Bible becomes the "all-sufficient rule of faith and practice."

But this but carries the dilemma back one step further. The Bible itself is open to various interpretations, not to say various translations. Who shall determine the authoritative version and meaning? Shall we have an authorized body of leaders who will declare to us the safe and sure rules? Then we are back in the bondage of external

authority once more; we should have done well to remain inside that great historic church whose authority has the weight of tradition back of it, whose decisions are based on a thousand years of precedent!

Is there any real stopping-place for the protestant before he comes to the recognition of reason as the final authority for the individual? Are not all other stopping-places unsafe, insecure, dangerous to his moral and intellectual integrity? Such questions as these must be asked, because democracy is involved in the progress of a religion that shall dare to be as free as life itself. The whole movement of the modern world is toward freedom. Religious energies ought to open the way for this onward movement, just as in the Reformation religious interests and impulses carried the Renaissance over into the actualities of life.

The Fate of Protestantism.—Protestantism was originally built on the doctrine of the freedom of the individual conscience. Narrow dogmatism was its immediate outcome. Logically, the authority of the Bible is exactly the same as the authority of the pope; it is an imposed external authority attempting to control life and belief and conduct. But psychologically it is different; for while the authority of the pope holds the adherents of that authority together in one fixed communion, the authority of the Bible, working through many individual interpretations, divides the Protestant world up into many diverse, antagonistic, bickering, even bitter, sects, each claiming to be the truest exponent of the actual teachings of the sacred scripture. In fact, the history of Protestantism for two hundred years after Luther shows that it was little if any more tolerant of individual conscience than was Catholicism. Calvin's treatment of the young Doctor Servetus in Geneva is an illustration of what the intelligent Protestant could do to preserve the faith from hurt by the free individual.

It is just the persistence of the old folkway attitude. The human mind tears itself free from an old institution whose arbitrary authority it can no longer endure, but it does not tear itself free from *institutionalism.* It proceeds to construct a new institution for its own refuge, and then *all the old institutional sanctities gather around this new structure.* From within the old structure the ideals of independence of individual thought, individual responsibility in conduct, free life on the basis of reason, had all seemed the revelation of a divine new order. Rebellion from the old brings freedom to realize the new. The new is constructed, but the rebel under the old system has now become the center of authority under the new order, and he submits to the individual disagreement of his underlings with just as little grace as was manifested toward himself under the old system. The Pilgrims in America are standard examples of this folkway tendency.

Protestantism, in the sense which Luther first gave it, cannot exist without freedom of intelligence, genuine liberty of the individual reason. Free religion can only find itself at home in the world of free science. But when Erasmus wrote of the tendency of the times, "Wherever Lutheranism rules, there the sciences are neglected," he wrote the beginning of the end of that fundamental Protestantism which was the first hope of the Reformation.

The Results of the Reformation.—Three main types of life emerge from the Reformation period; or at least the suggestion of three types. There is first the Catholic type which, reorganized, pared of some of its excesses, and reconstituted in the counter-reformation, came forth to continue in large measure the presentation to the world of that majestic and final interpretation of life, social ideal, and education which had been worked out under the dominance of the Middle Ages. This still-powerful bearer of tradi-

tion of the Middle Ages represents the great conservative interpretation and organization of life. Holding a more consistent position than orthodox Protestantism holds, it makes powerful appeal to all who feel the struggle of the world too great for them; it offers retreat for multitudes of men and women who want assurance and certainty of doctrine; and it promises to remain one of the abiding powers in the education of the race and in the organization of the people—just as long, at least, as there are those who demand a world of fixed meanings within which to live.

The second of these types which emerged from the Reformation may be called the Protestant type. The Protestant has had much to do with the course of history since the Reformation. He has occupied an anomalous position and has helped to make these centuries of history bloody and difficult. Some things he has been willing to leave to the determination of reason; other things he has stood for with all the intolerance of a primitive bigot. To be sure, Protestants range all the way from those who are scarcely to be distinguished from Catholics to those who claim to be absolutely liberated from the tyranny of ecclesiastical rule. Socially, the Protestant has been a constructive force in modern history. Logically, however, he has occupied an impossible position. He has been neither bound nor free. Perhaps for that very reason he has been able to accomplish much. He has fought for freedom with all the terrible enthusiasm which moves other men to fight for an eternal dogma. He has won freedom,—within limits set by his own desires,—and he has, in turn, denied the right to liberty to all who have disagreed with him. He has been at once the most bitter foe of old orthodoxies and the uncompromising champion of new orthodoxies. He represents in striking fashion the description of the member of the folkways set forth in a former chapter. Each suc-

cessive reconstruction of a world of habit supersedes all previous constructions. It satisfies; it becomes identified with the world itself. It is not merely the last formulation of the world; it is the world. Hence the standards of action, conduct, and belief found therein are all final standards, and since the member of the group lives by them (at least he fancies he does), he attempts to apply them to all other individuals, or at least to all who would join his group.

The third type of life that emerged from the Reformation period may be called the secular. This is, of course, not new; but from the Reformation forward the secular type comes to assume a new significance and importance. Its affiliations are with the old Greek ideal of a free and balanced life; it found a certain renewal in the saner side of the Renaissance. And since the Reformation this type has found fullest expression in, and given fullest support to, the modern movements in science, political and social reform, and kindred efforts to make this world a worthy place for man's living. This secular interest has not been anti-religious, but for the most part it has been anti-sectarian and anti-dogmatic. Sometimes it has been accused of being atheistic; mostly it has professed to be agnostic. Its religion has been of a natural sort; its beliefs have grown out of the advances of science; its interests have been human, rather than other-worldly. But a good deal of modern progress may be set down to its account.

The Reformation was not a simple incident in the history of humanity. It was, in its beginnings, a profoundly disturbing revolution which undertook to do too much at one time. It dug up the soil and showed the roots of human aspiration and necessity underneath, and then attempted to restore the old sods. That was impossible. Since then all sorts of curious growths have been sprouting

up, some good, some indifferent, some evil, but all have been *experiments* in the search for the understanding of human nature. The great pity is that these have not been looked upon as experiments, to be made and tested and judged, and then kept or discarded as the results approve. Men cling to their modern superstitions as tenaciously as ever the primitive man hoarded his fetishes.

But there was implicit in the Reformation a doctrine of human experience which is being realized in modern science and democracy: the freedom of the human spirit and the right of the individual to access to the sources of truth. The working out of this fine ideal into a genuine program of education lies still in the future. The modern world has dallied with it and wished for it, but never really dared to attempt it in fullness of will. It is the largest task of the present moment. Science is, on the whole, ready for it, as we shall see; democracy, that is, political democracy, is not quite sure about it; religion, whether Catholic or Protestant, is mostly afraid of it. It means the realization of a full social and industrial democracy, which is a fascinating and at the same time an appalling ideal. Its fate is held in the secrets of the future.

Other phases of this problem must engage us now, though eventually we shall come to the story of the educational program that stretches from the Reformation to the present time, and which gives intimations of what the future of education is to be.

B. INTELLECTUAL REBIRTH: THE RISE OF SCIENCE

It is a hopeless task, of course, to attempt to tell the story of the development of science through the modern period in a brief chapter. That will not be undertaken. But the fact of the rise of the attitude of science, as over against the attitude of scholastic learning, is probably the

most important fact in the whole range of modern experience; and that must be clearly set forth.

Medieval Science.—We have already seen that the master mind of the later Middle Ages was Aristotle. Not all the sins of that period should be laid at his door, however, for in his own time he opened to the world great areas of the unexplored, and at times, at least, he came close to the borderland of actual experimental science. But he came down upon the Middle Ages as the exponent of the closed system of medieval thinking; his logic set the absolute limits to human endeavor and closed all avenues of progress. He turned back the intellectual life of the world upon itself; and since the intellect cannot be endlessly busy with routine things, because, if there is no worthy task upon which intelligence may expend its energies, it must find some unworthy object, Aristotle may be justly accused of being largely responsible for the absurdities of much medieval science. That is to say, there is no real room in an absolute system for science; hence intelligence must either go to sleep in such a system or seek illicit pleasures outside the system. Some indication of these illicit pleasures may be found in the developments of alchemy and astrology in the later Middle Ages. Of course these pseudo-sciences were very old, dating from old folkway conceptions of the race; and nothing shows more clearly the essential "folkway" nature of the medieval world than the welcome which old folkway conceptions continuously received in that period.

Roger Bacon declared that he would be glad to see the works of Aristotle burned, because there was nothing in them of value for the new age and they were the cause of endless errors and ignorance. One lasting limitation of the Greek view of the world was their belief that thinking itself brings us to the truth; and Aristotle, despite his own attempts to observe the world of nature, really brings us

back to a nature woven mostly of thinking, of which, indeed, thinking is the real key. Scholasticism grows out of and lives upon this conception. The scholastics are, as Francis Bacon observed, like spiders that spin endless webs out of their own bodies. These endless webs of scholastic thought wrapped the human mind about. The tasks of escaping from them, of tearing them to pieces, of facing the world with fresh minds, and of working out the new methods of scientific procedure are all in the future. These tasks will be many-sided. They will involve new psychologies, new logics, new methods of investigation covering many ranges of experience, new conceptions of the nature of the world and of human experience, and new philosophies. Human nature, human credulity, will be subjected to many shocks and many strains. The unbelievable will become the commonplace; the unpredictable will continually happen. The unknown will be transformed; it will no longer be the realm of certain terrors, but will become the limitless promise of beneficent gifts to humanity which the brave may search out and bring to the uses of life. Uncompromising intelligence, slowly organizing its forces for the great task, will transform the borderland of human living from a realm of certain evil forces into a land of uncertainly endless possibilities of human good.

The New Universe.—First must come the larger transformation of the structure of the universe itself. The old, earth-centered universe of the Ptolemaic cosmology gives place, in the fifteenth and sixteenth centuries, to the new sun-centered universe of Copernicus. It is a type of the whole modern movement of thought. But the new system of Copernicus was not easily accepted. Not only was it repugnant to the minds of most men who were steeped in the doctrines of the church,—which held the earth to be the most important of the worlds of space,—but even leading scien-

tists did not agree,—Tycho Brahe, one of the really great astronomers of all ages, being one of these. But Kepler appeared with his "Laws of Planetary Motion"; and later Galileo, discovering the uses of the telescope, watched the movements of the heavenly bodies and helped to bring conviction to the minds of men, although he brought ecclesiastical condemnation upon himself by thus demonstrating the unbelievable and the undesirable.

The New Physics.—Galileo was also responsible for laying the foundation of the new science of physics, which should be able to deal with matter and motion within this new universe in intelligible terms. Along with his name we must place those of William Gilbert, who by his work in magnetism and other forms of electrical energy helped to lay the foundations of all modern developments in that field; Torricelli, who demonstrated the fact that air has weight and who invented the barometer; Robert Boyle, who carried the whole question of the pressure of gases further; Sir Isaac Newton, who first showed that light was not a simple phenomenon, and who set forth the first comprehensive statement of the law of universal gravitation; and perhaps Laplace, who gave the first modern expression of the origin of the solar system.

The New Biology.—Aristotle's four fundamental substances and four "essences" could not satisfy the new age; but the transition to a new outlook was difficult here, more difficult than in physics, because it dealt with concerns that were nearer to the intimate life of men. The transition period is a period of magic, of slowly disappearing miracles, and of the gradual appearance of conceptions that are distinctly modern. Paracelsus is representative of this transition era. He studied living forms at first hand, and he threw suspicion upon the medieval scholars. But he did not escape from the magical conceptions of the times.

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Harvey (1578–1657), on the other hand, does almost completely escape; he demonstrates the principle of the circulation of the blood. From this time forward biological studies come gradually out into the clear light of modern science.

We have not space here to go into the full discussion of the extension of human knowledge in the great centuries of discovery and exploration. Geographically, the earth was made over quite as completely as was the universe. At the same time the discovery of new races in hitherto unknown lands made old theories of humanity untenable; the beginnings of anthropology must soon appear. In the course of the years studies in biology become comparative, i.e., comparisons appear between various animal forms and a certain likeness of structure and function becomes apparent. In the rocks of the earth fossils exist; the explanations given by Aristotle no longer satisfy nor do those of the medieval romancers. A new explanation will soon appear; the earth itself has had a long, eventful, even a tragic history. The likeness of man to lower forms, at least in anatomical ways, will attract attention. Many lines of evidence, all converging toward a common end, will gradually force home upon the race the conception that man was not "created," as old folkway traditions all relate. Man is not a stranger on the earth, put into it after all other processes were finished; he is of the earth itself, wrought of the self-same processes, though doubtless more highly wrought; his reality is the reality of the universe itself. In short, a theory of evolution is proposed. Henceforth all constructive science will lie within this general theory. The world itself will cease to be fixed fact; it will become process. Science will little by little give up its fixed substances and its vital essences, and by stating the world, including life itself, in terms of the most simple

elements of mechanics, understanding will take the place of superstition and control will take the place of chance and fate. Thus actual approach to the data of experience brings the world to a complete rejection of the general medieval construction of the world; and in place of that construction modern scientific thinking has given us a world of simple elements, organized and interrelated in recognizable ways, in the midst of which human aspirations seem to have a surer ground and human hopes a more complete control of their own essential destinies. Having in this brief fashion faced the intellectual movement on one side, we must now face a corresponding line of interrelated development.

The Philosophical Movement Through the Modern Period.—We have noted how on the scientific side little by little the work of the single individual scientist assumes the right to criticise and deny the whole accumulated mass of tradition from the past. Scientific investigation does not depend upon a *consensus* of opinion, but only upon the verification of observed fact. The experience of the individual scientist becomes the fertile field in which modern knowledge grows. Psychologically and philosophically, therefore, the world must be remade to meet the new facts. This first takes the form of complete "enlightenment." All old dogmas shall be criticised out of existence, whether in religion, in politics, in ethics, or in education; nothing shall remain but the clear ideas that cannot be doubted. All else shall be swept out of the household of the new humanity upon the dust heaps of the past; the individual reason shall be the final court of appeal as to the reality of any particular of experience.

This is the "enlightenment," an age which repeats in some ways the experience of the age of the Sophists in Greece. But reason outreasoned itself and became utterly

artificial, resulting in the destruction of most of the graces of life, giving to religion the superficialities of the deism of the eighteenth century and to poetry the pedantic hardness of Pope and Dryden.

Of course such a tendency could not be permanent. Humanity cannot long endure the denial of its best elements. "Romanticism" brought back the warmth of the inner life of the emotions. Rousseau denied the right of institutionalized reason to prey upon the feelings of men. Man comes back to a belief in himself. The French Revolution is, from one point of view, but the full expression of this fundamental restoration of man's faith in his own human worth.

But the whole problem of the significance of the intellectual is thus obscured. In the "enlightenment" the intellect triumphs and life becomes scarcely worth while; in the "romantic" movement the worth of human living returns, but the intellect is subordinated to the feelings. Then Kant comes in to reconstruct the whole problem. He carries out the revolutionary work of the past three centuries. He brings the "Copernican revolution" into the world of thought. The natural world of our experience is, itself, the construction of the mind; the mind is creator and lawgiver of the world. The mind is not molded by things; things conform to the mind in the process of becoming known. What we know depends upon the mind's powers of knowing, and we know what we know according to the methods of the mind that is engaged in the knowing.

The mind thus becomes the creative agent in the making of the world of experience. It creates both truth and falsehood; therefore it needs to learn how to create truly. Thus the problem becomes one once more with the problem of science, and science and philosophy join hands in the working out of the fundamental theory of evolution which is to displace the old theory of creation and give a genuine place

for thinking in the growth of a world whose psychology is the psychology of the creative, active experience.

Some Special Problems.—Thus that "inner life," lost through the Middle Ages and emerging fitfully in the Renaissance and the Reformation, comes now to have some real security. Conduct belongs to the moral personality, not to institutions and dogmas. All the outer world, if it is to have worth for the individual, must be founded upon and grow out of the experience of the individual, giving room for the expression of his will. External law must make room for free moral activity; the "Laws of Nature" are but the regulations which man's creative reason imposes upon nature. Man rises above the world of nature and begins to control his own destiny.

To be sure, this is a result that is temporary; science and philosophy react upon each other all through the nineteenth century. Science does not always know its own consistency, does not always follow its own logic. There are conflicts with old orthodoxies of all sorts. Religion refuses to yield one jot of its old prerogatives and seems to be slowly dispossessed. Science would reduce all the phenomena of the world, including mind, to simple mechanisms. The mind refuses thus to commit suicide. But through it all, thinking goes on, observation advances, data accumulate, and hypotheses are advanced, criticised, and discarded. The world is electric with advancing thought and far out upon the frontiers of science the lights of the pioneers shine cheerily through the dark. It is an age worth living in. History is not ended. We are in the very midst of history, not the folkway life, but the life of movement, of change. The evolutionary process is going on all about us, the search for higher adaptations, for the life that is good. And science, intelligence, is central in that search for the good life.

The problem of science is slowly defined. What is the place of intelligence in human living? Is it the working out of a formal "body of systematized truth"? Sometimes the older "sciences" seem to take that point of view as they stand idly by and lend no helping hand in the struggle of the younger sciences to find secure footing in the mazes of old methods. But on the whole, science comes slowly to the acceptance of a really great task, to wit, "the working out of the conditions under which a good life is possible to man," as Paulsen states it. The world is richer in materials than ever before. Is it richer in living? Nature, society, the new universes, the new realizations of social order, the utterly new methods and materials of living—do these make human life more worth while? All the old cultures of the world, too, have been round about the modern period in increasing fullness; but these have not satisfied, for the modern period could not return into the folkways. In the main the face of humanity has been toward the future all through the modern period; and when we consider the amount of work that has been accomplished since Bacon, we must admit that the age has been wonderfully active.

Yet other tasks remain to be done. Science must get on with its work. The life of the individual must be completely emancipated along all constructive lines. He must become free in three great directions, with that freedom which the truth alone can give:

(a) In his capacity to work creatively, joyfully, and intelligently in his chosen field;

(b) In his capacity to share with others the products of his work and theirs, and the common responsibilities of common living;

(c) In his capacity to know. It was the fate of the millions of the Middle Ages that they found themselves always

"on the outside." They did not belong; they did not know the secrets of the chosen. But the science and the democracy of the modern world are declaring that all men must have the chance to be "on the inside" with whatever democracy is accomplishing or dreaming and hoping. These great freedoms in action, feeling, and knowing are but the necessary and logical implications of the promises that have emerged in all the "rebirths" of the modern world, in Renaissance, Reformation, revolution, and enlightenment.

The world is becoming immeasurably complicated along all these lines, complicated with details of information and with new scientific enterprises and technics. Intelligence is prying into endless numbers of dark crannies of experience. We are in danger of being lost under the accumulations of experiences. We must learn the lesson taught by Socrates: nothing but whole ideas growing out of real experiences, tested by actual fires of experience and purified through vital contacts with the world's doings, can take the place of the "half-thoughts" of our pseudo-science and our ephemeral philosophies. In an age like this, when social order seems to be lost in world-anarchy, "the one power that can save, can heal, can fortify, is clear and intelligent thought. Opinion, that is, real thinking, is no longer a parlor game, a matter of dinner-table conversation; it is a relentless necessity if we are to keep the flag of sanity flying above this tortured world."

The chance to think, the materials with which to think, the stimulus to think—these must become the possession of every individual, else he will fall between fragments of the world and be lost. This is especially the task of education in a democracy. How shall men be helped to think? How shall they be stimulated to thinking? How shall they be secured in the materials with which to think sanely and

constructively? Let the schools answer these questions.

Life still grows up in the midst of common habit, as in the primitive world, and always must so grow. But the world of men and affairs is now no longer the small perceptual world of the primitive group, with its limited horizons and its meanings clearly open before us. The modern world continuously demands a broader intelligence, a freer moral energy, a quicker civic sense, a greater industrial adaptability, a more thorough appreciation of the spiritual values that make humanity. There is but one escape from these demands: complete surrender to some fixed routine, the sinking of all personality in the mechanics of industry, thus proving the charge that "never before in history has it been so easy for a simpleton to live."

Education must face these new and larger demands, which grow larger continually. The history of education in the modern period is sketched against the background of these great revolutionary and reformatory protests against the iron-clad systems of the Middle Ages. Education must face the conflicts of the past with itself in the new order. It looks forward either to a complete return to the institutionalism of the Middle Ages or to the complete freedom of some as yet unrealized social democracy which shall learn how to use science as its means of living. The long years of struggle lie between us and that goal. Indeed, the goal of democracy is not a goal at all; it is a continuous alertness, a constant adaptability, an eternal vigilance. It is this unescapable fact that has made almost all nations in the past lose their nerve and give up the struggle. Will America also lose her nerve?

The great educational program that has been rolling in upon us throughout this modern period and emerging into the present may be stated somewhat as follows: How shall these great but still incomplete resources of knowledge,

these great ideals of a constantly moving social order, these institutional treasures inherited out of the long past,—our understanding of experience and all other aspects of our modern world-life—be wrought into a working program for the continuous realization of the larger good in human living and the continuous re-creation of that larger good in the continuous generations?

C. POLITICAL REBIRTH: REVOLUTION

The political structure of the Middle Ages was in harmony with the religious ideal and the ecclesiastical structure. That structure may be described as follows:

> The whole is a continuous series of ascending steps or grades, drawing nearer and nearer to Life; a kind of ladder down which life may be passed from level to level; each level has to receive from one above and pass on to one below. In this scheme each part has its own special value and its own special work so long as it remains within the structure of the whole; it lapses into nothingness as soon as it makes itself separate. This conception of life took historical shape not only in the hierarchy of the church, but also in the feudal system of the Middle Ages, in which every power vested in any individual was regarded as a loan from the grade above.[1]

This describes the feudal political system and the hierarchy of the church. Down each of these, life, the right to live, the hope of life in the future, the commonest necessities of life, were passed from the head of the church or the head of the state to the lower levels of society. This was the very climax of aristocratic society, with the holy sanctions of the church to give it permanence and control over the minds of men.

This was the "larger folkway of the Middle Ages" based upon a return to the habitual attitudes of the primitive world, but organized now with all the strength of Roman

[1] Eucken: "Main Currents of Modern Thought," p. 343.

political institution, Greek logic, and authoritative revelation from heaven to defend it from criticism or attack. It is as primitive a conception as that revealed in the old story of Cain. Within the group an individual is safe, protected, with some outlook toward the future; outside the group he is nothing at all, an "outside-the-law," "a fugitive and a wanderer in the earth," one whom anyone may freely slay, since there is no one to avenge his death. All good, all significance, is handed down from above, from the group, from the head of the group, from the super-head. Cut off from this source and channel of life, the individual becomes utterly useless and insignificant.

The Dissent from this View.—The modern world has radically dissented and departed from this view. The Socratic doctrine had been different; primitive Christianity had suggested something other; the Teutonic barbarians had developed a different attitude in their original institutions. But Socrates was lost in the Platonic speculation; primitive Christianity lost its original democracy in the growth of the doctrine of the transcendence of God, which called for a special class of priests who had special access to him and who made up the hierarchy; and the Teutonic simplicity was overwhelmed in the magnificence of Roman institutions, even when in decay.

But there has developed in the course of the modern period a rather clear conception that is now striving to take the place of that other point of view. According to this democratic ideal, as we may call it, instead of being a mere fragment in the world, the individual now finds himself in a position of growing opportunity and responsibility; he may be himself a whole world, a kind of center of reality from which he may indefinitely establish ever wider relationship with others. To be sure, the development of this ideal has not destroyed the existence of the other. The

medieval attitude has not been broken down. The democratic attitude is nowhere fully accepted, for it is so revolutionary in its implication as to frighten men, and it involves so much of general reconstruction of the world that the task can be said to be little more than begun. But everywhere in civilization the medieval attitude has been "toned down," and in many lands it is all but completely shattered. Even the present great war tends more and more toward the discrediting of medieval attitudes.

But the struggle for democracy involves conflicts not alone in the political field. It must be fought out in all institutions and in every minutest aspect of our social and personal living—in industry, in religion, in social relationships, in morality, in the home, in actual legal attitudes, but especially in the schools and in education. The struggle for democracy is an expression of the determination of the modern world to remake the whole range of social relationships under every possible aspect, and to construct a world in which every individual shall in truth became a "sanctuary in which life is immediately present in all its infinite greatness." And in this general struggle the political phase is a most important part of the problem.

Incidents in the Long Struggle.—The Renaissance contributed the energy of freed emotions; the Reformation was in large part a revolt of the oppressed peasantry against the conditions of industry; the growth of knowledge gradually brought disillusionment as to the realities and terrors of medievalism. Hence the seventeenth and eighteenth centuries saw the dissolution of the traditional doctrine of the supernatural foundations of the state and the growth of the doctrine of the natural foundations of political institutions. Although such an expression of absolutism as "I am the State" might be uttered by a French king in the seventeenth century; although the doctrine of "the divine

right of kings'' lived on into the middle of the seventeenth century, even in England; yet feeling, knowledge, and action were all uniting for the decisive contest.

The English Revolution began shortly after 1603 with the accession of the Stuarts to the throne. Cromwell's wars for liberty, the downfall of Charles the First, the Commonwealth, the final overthrow of the Stuarts in 1689, and the adoption of the ''Bill of Rights''—these events show the progress that was made in a single century against the medieval structure of absolute political control in one country.

The American Revolution in the eighteenth century, the French Revolution a few years later, and the various revolutions of the nineteenth century in Europe and in Latin America, are phases in this world-movement. The English ''Bill of Rights,'' the American ''Declaration of Independence,'' the ''Contrat Sociale'' of Rousseau (though grossly overdone), were and are all monuments on the road of progress. These events all indicate the actual surging forward of the masses of men toward the eventual full participation in government and in the political determination of the conditions of common welfare.

Significance of this Forward Movement.—It is plainly seen that this forward movement of the masses of men involves the right of all men of all classes to pass judgment upon all sorts of questions. These questions may be incidental, unimportant, local; but they may also be fundamental, supremely important, and involving universal issues such as the very destiny of the state or the whole progress of civilization. On these larger issues the masses of men, kept in absolute ignorance through scores of centuries and denied any personal share in the problems and responsibilities of government, are found to have little or no real comprehension of the issues involved, the values at

stake, or the long struggles of history by which these values have been so far achieved. On the other hand, and this cannot be too much emphasized, the long struggles of history, interpreted under the distorted doctrines of medievalism, gave to the ruling classes and groups a false estimate of their own grasp upon these great questions. Back of the proud boast, "I am the State," lies implicit the profound assertion, "There is absolutely nothing important about the political problems of the day of which I am ignorant"; which is, of course, almost, if not quite, as absurd and precarious a foundation upon which to build a political system as is the ignorance of the submerged peasant. As a matter of historic fact, there is more hope for the world in the undisguised ignorance of the peasant who may learn than there is in the boundless assumption of the aristocrat who already knows all and who feels it his largest duty to set himself firmly against the introduction of any new element into the political order. But all these things simply mean that this forward movement finds its most tremendous problem in the development of an intelligence equal to its great social task, and therefore the development and organization of an education that shall be as completely democratic as the spirit of this forward movement itself. This is something which has, even yet, been barely attempted anywhere in the world.

The Inner Development of Democracy.—The development of democracy involves the gradual unfolding of the political nature of the individual and his acceptance of the social and civic task as his own personal task. Aristotle had declared that "man is a political animal," meaning that man really finds his life only in real relationships with his fellows. But absolutism, as we have seen, denied to men the chance to share in civic interests, thus depriving them of the means of developing their political natures.

Religious institutions supported political absolutism in this denial. It is too long a story to tell at this time—how men have in a measure won their political freedom, i.e., the chance to develop their inner and civic natures. One illustration of how bitterly the conflict was waged, how real it was to the men of the sixteenth, seventeenth, eighteenth, and nineteenth centuries, may be given here as we pass on. In this illustration from Holbach's "System of Nature," nature stands for the new tendencies toward democracy, religion for the absolutism of the Middle Ages:

> Nature bids man consult his reason, and take it for his guide; Religion teaches him that his reason is corrupted, that it is a faithless, truthless guide, implanted by a treacherous God to mislead his creatures. Nature tells man to seek light, to search for truth; Religion enjoins upon him to examine nothing, to remain in ignorance. Nature says to man: "Cherish glory, labor to win esteem, be active, courageous, industrious"; Religion says to him: "Be humble, abject, pusillanimous, live in retreat, busy thyself in prayer, meditation, devout rites, be useless to thyself and do nothing for others." Nature says to man: "Thou art free, and no power on earth can lawfully strip thee of thy rights"; Religion cries to him that he is a slave condemned by God to groan under the rod of God's representatives. Let us recognize the plain truth,—that it is these supernatural ideas that have obscured morality, corrupted politics, hindered the advance of the sciences, and extinguished the happiness and peace even in the very heart of man.

This quotation is not part of an academic exercise; it is one little item in the long argument by which men convinced themselves that they were, and are, actually free.

This doctrine of the gradual unfolding of the political nature of every normal individual finds its larger argument in the democratic theory of "the worth and dignity of every human being of moral capacity." This is the basis

of the theory of self-government, the actual transference of the center of growth and authority to the masses, every member of which is to share in the responsibilities, in the goods, in the evils, in the knowledge, and in the whole meaning of the civic life. This will include, also, as we shall see in a later chapter, a just share in the economic goods. This is the modern ideal of social democracy, and therefore it ought to be, it must be, the aim of all makers of our civic life.

The Democratic Ideal of Education.—The fuller statement of this will occupy us in Part V, but a brief discussion of the education needed in a modern social democracy is in place here. Democracy intends the actual release of all the energies of every individual for the enrichment of the personal and social life of all. Under Greek institutions the existence of slavery freed the few thousands of "citizens" for the development of the noblest and most intelligent life the world has ever known. The aristocratic social order of the Middle Ages released some few favored individuals for intelligence and service to the common good. But the essential inhumanity of both systems determined the ultimate elimination of both. Democracy today implies the growth of a social order that shall fight to realize not some historical estimate of human good, but the intelligent, the reasoned, the scientific estimates and calculations of goods that are good for all in ever-widening inclusiveness.

To be sure, there are many obstacles in the way of the realization of this ideal. Among these is the imperfection of our sciences of human good, as yet. Moreover, old aristocratic attitudes, implying that the good of the few insures the proper good of the many, do not readily give way to democratic demands. Inherited differences of "class" and wealth; natural differences in physical and mental

equipment, interpreted as proving the existence of a "natural aristocracy"; and primitive traits of human nature which are excused by being classed under such terms as "ambition," "success," "self-made men," and the like, tend to blind men to the real significance of the problem. The actual realization of democracy must wait for the fuller understanding of what democracy really is in its social and psychological aspects. The educational program of democracy depends upon this same more complete development, with the definition of the educational problem. At present we are largely satisfied with the fact of "universal compulsory school attendance"; we have scarcely begun to realize what democracy must do to make sure its own ideals are taking the place of the antiquated ideals of the autocratic ages.

The average man has but a pitiful share in the culture that the schools are supposed to offer. Even the graduates of our universities have scarcely touched the deeper currents of the world's moral and spiritual aspirations, by means of which, through thousands of years of brutal suppression, the masses of men have kept alive their fundamental spiritual impulses. "Education" rarely touches this inner life, though occasionally the rare teacher comes upon it. Yet democracy is to rise out of the culture of this inner life of humanity, not out of the repetition of the stale externalities of the ages. Without the culture of these fundamental impulses of man's inner life there can be no hope for a democratic social order.

Occasionally a prophet of the Christian religion catches a glimpse of this same inner life of the spirit and renews faith in the earth. But that is rather rare. Christianity has been taught among men for near two thousand years, yet somehow its inner meaning has not yet taken deep hold upon human life, its teachings have not become the world's

real convictions. Our noblest human impulses are not always accepted by its representatives as worthy of trust; our human social order is not accepted as the task of its transforming mission; and our human hunger for a life in which instinct and emotion shall become one with moral ideal and religious passion is looked upon as of the evil. Christianity became profoundly disconnected from life in its medieval period, and it has not yet recovered from that deadening experience. It is still too much an official religion, conserved in formal institutions and handed down to the needy world from an other-worldly source. It is still too much afraid of science, afraid of humanity, afraid of the democratic aspirations of the age!

The larger need of our democracy in this world-crisis is found in the widening of its program to include all aspects of our living,—industrial, social, moral, educational, and religious; in the conviction that such a widening of life is desirable and that the task of our political organization is to assure us its realization. This will involve a new expression of the old passion for freedom, since it seems certain that these larger democratic aspirations can be achieved only through the continuance of the same actual, desperate, tragic, emotional, and intellectual struggles as those which have marked the most earnest periods of the past four centuries. Democracy is not a system that can be set up and left to run its own course. Eternal vigilance is the price of democracy. But vigilance of this sort depends upon a disciplined mental life. Now discipline may kill mental life and initiative; it has practically always done this under any form of autocratic control. But discipline may also fit the mind for the widest initiative and for the most complete inventiveness; this is the sort of discipline democracy demands. Therefore the education demanded by a democratic social order must be completely

liberating in all its effects. Its materials, its institutional controls, its methods, its administrative attitudes, its implicit psychology—these must all be of the democratic spirit. And our democratic ideals of government must be broadened until they can permit such a development of our educational efforts. For the chief obstacle to-day to the growth of our democracy is the undemocratic character of most of our education. If the world is ever to be "made safe for democracy," that process must penetrate into the very fiber of our educational procedure.

D. ECONOMIC REBIRTH: THE INDUSTRIAL REVOLUTION

We have seen how industry was carried on and the economic necessities of men were met in the life of primitive peoples. We have come upon social conditions within which hard and fast lines have been drawn between the working groups and the leisure classes; we have, indeed, seen some of those conditions developing. We have seen that such distinctions seemed to be an essential part of the organization of life in the Middle Ages, that period of fixed orders in all lines of human relationship. We have noted the "medieval dilemma"—the difficulty of a life that rather despised the physical means of living through its extreme interest in the means of higher living, yet, being compelled to use those physical means, must do penance to escape from the penalties incurred by such use.

We have seen the miseries of the poor in the Middle Ages, miseries mitigated by the glories of the great and the hope of heaven. But we have also seen how the rise of cities made room for the gradual growth of a great middle class of freemen, neither serfs nor aristocrats, with whom intelligence might find a home, and who should become the leaders in gilds of free workers and the hope of the development of free institutions generally.

Intermediate Stages.—It is a long story from the disintegration of the feudal system of industry to the modern system, far too long to be undertaken here. It leads through the growth of bodies of freed laborers in towns and cities, with their developments of gilds and their systems of apprenticeship; the gradual development of systems of handicrafts, carried on in simple fashion by groups of workers in more or less isolated localities and with the use of rather simple tools; the slow growth of the power of control over new sources of energy, such as water-power which could be turned to use, thus facilitating production; until finally we come to the dawn of the era of invention, with its wonderful steam-engine and its ever more complete elaboration of tools, with its eventual expansion into the age of machinery which brings about the real industrial revolution.

All through this modern period there had been a considerable increase of capital; that is to say, social productivity was developing more rapidly and a larger available surplus was in existence. The rise of international commerce, with the larger exploration of the world; the discovery of gold and silver mines in America; the draining off of all surplus productivity to the centers of business exploitation—all these factors contributed to the development of two "free" classes to take the place of the unfree classes of the Middle Ages. In place of the aristocrats of the earlier period, we now have the capitalist; in place of the serf, we have the wage-earners, soon to be lumped in the mass under the general term of "proletariat." Capitalism is a long growth, and it has its full development only after the industrial revolution.

The Industrial Revolution.—"The labor of the peasant was incessant; his food, his clothing, and his habitation were of the rudest and the poorest. He was ignorant and

superstitious, and his oppression made him sullen. He was the butt for the wit of the noble classes and the courtly poets, and the name "villain" (villein) has been handed down by them to us as the synonym for all that is base."[1]

Under the gild system of industry all journeymen naturally looked forward to the time when they should become masters. But as the modern employer came into existence, the medieval journeyman ceased to exist, and in his place came the modern workingman, or at least his forerunner. These workingmen were shut out from the gilds of the employers; they thereupon began to form gilds of their own, which were the antecedents of modern trade-unions. "From that time onward, capitalists and laborers are separated, and the history of labor ceases to be the history of capital."[2]

But these earlier trade-gilds are not the historical forebears of modern trade-unions. Those earlier unions all disappeared in the social developments by which larger-scale industries came into being and in the midst of which all the old gild regulations were broken down, so that the employer was free to hire whom he could at such wages as he must, and the employee was free to sell his labor-power where he could at such wages as he could command. The age of free contract brought an end to all artificial regulations of labor and wages. "Human labor became a commodity the value of which is fixed by the same laws as govern the value of any other merchandise."[3]

The development of machinery as the actual means of productivity tremendously stimulated this movement toward free contract. The steam-engine made manufacturing independent of natural conditions, such as rivers, water-

[1] Harding: "Essentials in Medieval and Modern History," p. 179.
[2] Gede: "Principles of Political Economy" (second American edition); p. 409.
[3] Gede: *op. cit.;* p. 491.

falls, etc., in large measure. Machinery called for large numbers of laborers, only partially skilled at the best, in the growing manufacturing cities. This development of machine-industry has been responsible for many aspects of the wonderful expansion of the nineteenth century. Indeed, the present industrial situation may be set down to this revolution in industrial methods.

But even so, the whole tendency was not a natural development. In the early decades of the age of the industrial revolution, particularly in the closing decades of the eighteenth century, England was very forehanded in aiding the employer to maintain his death-grip upon the laboring classes by passing very stringent regulations against combinations of laborers, making, for example, any combination of laborers for the purpose of asking for an increase in wages a criminal conspiracy punishable by transportation beyond the seas. Many an honest but starving English workingman paid for his temerity in asking for a living wage by working in the quarries of Australia for the rest of his life.

The Industrial Problem in a Democracy.—Perhaps the most distressing period in the history of human labor is that period from the close of the eighteenth century to the middle of the nineteenth, when men were still bound by the old legislative regulations and society was bound by the *laissez faire* conception, and before the revolt of the modern democratic movement in industry had begun. Wage-slavery was a real condition in those days not alone for men, but for multitudes of women and children as well.[1]

But since the middle of the nineteenth century wonderful changes for the better have been made. The old obstructive laws have been gradually broken down. Workingmen have fought during half a century for the right to organize

[1] Cf. Mrs. Browning's poem, "The Cry of the Children."

for the common protection of their standards of living and for the raising of those standards by all constructive means, such as education. The right to organize has been won in all intelligent communities and has been recognized in intelligent legislation. To be sure, here and there a voice may be heard denying this right; but such voices are anachronistic. The sober common sense of the modern community accepts the labor-union as normal and proper.

Not only so, but in practically all modern commonwealths distinctive legislation in the direction of protecting the standards of living, the health of the laborers, the moral quality of the industrial situation, and many other aspects of the economic system, has been enacted. Childhood is slowly becoming too precious to be exploited. Women are no longer, in most cases, permitted to be pitted against a soulless machine for the mere chance to earn a livelihood. Men are protected from the ravages of machines and from industrial diseases and overstrains. Humanity is beginning to be regarded as of more worth than mere profits.[1]

To be sure, a leisure class persists outside the tides of productive industry. Humanity is not yet entirely rational. The tasks of education are not all complete. Intelligence has not yet found its way to the heart of the industrial problem. Old brute forces still persist in some measure. The school is far isolated from industry. Education does not make organic connection with the whole life of the community. Industry does not play fully into and criticize our educational systems. Apprenticeship systems of education have gone; the machine has no place

[1] Recent American legislation (the so-called "Clayton Act") has officially declared that human labor is not to be regarded as a commodity, to be bought and sold in the open market. Instead, the basis of wages must be found in the maintenance of a genuine standard of living. The old doctrine of the immutability of economic laws has gone from the enlightened part of the community.

for them. Education, losing contact with industry, becomes bookish, remote, lifeless. Industry, losing the quickening touch of intelligence, becomes still more mechanical, inhuman.

We are in the midst of the process of making industry completely democratic by making its processes completely intelligent and its modes of organization completely human. Nothing short of this will suffice. Industry must become the servant of the human need. Neither machinery nor profit may be permitted to stand in the way of human living, and education must have a large share in bringing about this desirable result. Future developments in economic directions are altogether problematic. But it is certain that the bald assertion of the doctrine of "economic determinism" no longer carries conviction to intelligent members of the democratic commonwealth. Men and women and children are not condemned by *immutable law* to the degradations of poverty, but by *mutable ignorance* and the *sheer survival* of old and base forms of industrial organization. In our discussion of the intellectual revolution, we concluded that it is the task of science to work out the conditions under which a *good life* is possible. That task includes the economic problem. Modern social intelligence is engaged in that task. The destruction of old conventions by the pressures of war-operations furthers this phase of the task. Men must be economically free, else political democracy hides under a fine name a ghastly jest. Democratic education must work at this task. The hopes of our political democracy must become the possession of us all. The promises of our intellectual revolution must be made available to all. The larger liberties of the religious revolution must come to all. But beyond all these things, and giving substance and body to these fine ideals, the actualities of economic liberty must

be realized by all. For these reasons, the modern age has determined that all men shall have a chance to know the truth,—not the medieval truth that the afflictions of this world will be recompensed in Heaven, but the scientific truth that there is no reason (save our carelessness and unintelligence) why any one should be deprived of the real goods of life. The world may move slowly toward this goal of truth and intelligent organization. Education may be long on the way. But the approach to the goal is certain. Democracy demands it, and science is learning the way.

CHAPTER XXII

A SUMMARY: THE GENERAL CHARACTER OF THE MODERN WORLD

THE history of the four or five centuries of the modern era has been wrought out of continuous struggle along many lines, as we have seen; the four or five lines which we have specifically noted do not exhaust the subject. The fight to win freedom from the folkways of the Middle Ages has developed particular and peculiar features in connection with every aspect of human nature; but we may not take more time for specific surveys. We must here sum up and present in a general way the characteristics of these struggles and the nature of the modern world-spirit, for this spirit is the *social motive* that makes intelligible the history of education in this same period.

Relation of the Modern World to Medievalism.—Medievalism represents one of the two fundamental modes of interpreting the world and human experience. As such, it is probably the most complete expression possible to the human mind. It is an effort to establish a world-folkway within which all questions shall find authoritative answer, all impulses be put to rest, and all originality be turned to the strengthening of the structure itself. It must be again confessed that great numbers of human beings, at least under historical and present social and educational conditions, find satisfying refuge in some such sort of folkway retreat, refusing to battle with the conditions of living, declining to struggle with the problems of the world, permitting destiny to work its will with them. Politicians

and political conditions irritate them, and they are glad to escape from political responsibilities; religious teachers lull them to repose, and the ecclesiastical institutions take care of their spiritual interests and their eternal destinies; captains of industry pay them fixed wages, and the economic struggle does not concern them; all the proper questions of the universe have been given final answers in the Bible or church doctrines, and science is weariness and vexation of spirit; and the teachers they respect convey to them absolute knowledges, which completely destroy any possible initiative that they may once have had. Medievalism was not, and is not, primarily, a system of politics, religion, industry, and education; it is not fair, it obscures the truth we need to face, to identify medievalism with any historic system. Medievalism was, and is, an *attitude of mind,* a mode of interpreting experience, a system of logic, an inner construction of experience which may or may not develop a corresponding construction in the world of institutions. But just as long as any individual permits another individual or institution to *endow* him with his civic, economic, religious, or intellectual possessions, and thus to control his life and destiny, medievalism will continue to exist. Medievalism is life reduced to habit, controlled by custom, surrounded by authoritative tradition from which intellectual control has abdicated. Its answers and its activities must all be of a fixed and final type, so that life may be secure and without disturbance.

Anselm presents the extreme intellectual form of this attitude in his famous maxim, "Credo ut intellegam," which may be interpreted, "I bring my reason under subjection to the authorized world-system, since in that way alone can I have an orderly world of knowledge, even though that orderly world is the construction of another mind." But in the same way, though of course not so obviously, the same

ideal is expressed in economic terms: "I gladly submit to the social order, since in that way alone may I have a share in the world's wealth, even if that share be no more than a chance to work for some one else." A definite civic attitude seems also present: "I submit to the organized authority, because in that way alone may I find a place in the social world, for the position of even a serf is better than to be an outcast." And finally the religious ideal stands out vividly: "I conform to the doctrines, since in that way alone I shall become joint-heir to the treasures laid up for those who are faithful." That is to say, all medieval institutions existed in the truth of the dogma of Aquinas: "Real existence is not in individual being, but in membership in an eternal Whole." And this is, of course, of the essence of the folkways.

Now it is easily seen that the modern world must fight consistently against such a final construction of the world, if it is to win to its avowed ideals. There is an insidious danger here. Every forward movement holds within itself the possibility of giving over its active career and of settling down into its final forms, i.e., developing its own folkways, its own "Middle Age," and thus ceasing to care for further movement. Indeed, any movement is capable of becoming so completely satisfied with its own attainments and so fixed in its own accomplishments as to identify those accomplishments with the universe itself, even denying the existence of anything beyond its own perceptions and setting up its own standards of orthodoxy which make its old professions of progress seem like the ravings of lunacy. Many modern religious denominations are excellent examples of this fact.

But the modern world has committed itself to the cause of democracy, science, religious freedom, and industrial opportunity. Eternal vigilance is the price of any one of these, or all of them put together. There is no escape from

this vigilance, save in surrendering to the past; and that means giving over all that has been gained and denying the reality of the experiences of the modern world, whether in social or individual living. This would be the ending of all human hopes. However difficult and uncertain the way, the modern age is true to its inner self in one respect: it has put its hand to the plow and will not turn back!

The Ideals of the Modern World.—But the fact that the modern world must fight the essential spirit of the Middle Ages does not mean that medievalism has no value or significance. As a matter of fact, of course, the past has profound significance for the present and the future. This new age is like the Teutonic barbarian of a thousand years ago; nay, it *is* that Teutonic barbarian, now no longer a simple child of the forest, "fresh blood and youthful mind," but strong manhood and disciplined mind, with surplus energies released in Renaissance and Reformation and revolution, ready to destroy or construct, to build or tear down, as his mind may be turned. These new energies need further discipline not for their uprooting, but for their deeper strengthening, in order that they may learn how to turn their strength effectively upon that aspect of the great world-task most needing to be done. And these old folkways of medievalism, formed through the long centuries and firmly rooted in the lasting affections of men, should be just the instruments of this needed discipline of these new energies for the long tasks of the growing future—the digging out of the unsuspected resources of the world, the gathering of the materials of the new and larger intellectual and moral existence of the race, the combining these materials organically in the new and better social and industrial orders, and the realizing and expressing more fully the unbounded hopes of men.

To be sure, this very process of disciplining these new

energies of life would have meant the transformation of the medieval folkways. This process would have brought to the peoples new meanings for life, criticized away their stagnate attitudes, and given them the ideals of the modern world, the hope of progress, and the spirit of science. That would have meant the virtual destruction of the folkways! Yes, but each age must build its own universe. The trouble is that each age insists upon bequeathing its own structure, *unchanged,* to the next generation. As if any child can gratefully accept or gladly wear the old clothes of its ancestors! The earlier age ought to use up the materials of its own structures in giving its children practice in building, so that they, trained to the task, may in their own good time make the kind of life-structure that their own needs and ideals demand.

In some respects the revolt against medievalism,—that fixed and permanent way of looking at life, social order, human nature, education, and human destiny,—has been too wholly emotional, too unintelligent. After all, the understructure of any life is habit. Psychologically, this must be so. Correlatively, the understructure of the world's life must be custom and tradition. The accomplishments of the world to the time of Thomas Aquinas were too great to be lightly considered or thrown away. These accomplishments are conserved in that great body of habit, custom, and institution which is still in almost undisputed possession of great areas of society. The real genius of the modern world is not expressed in wholesale condemnations of the past; nor, indeed, in wholesale acceptation of that same past. If the modern age has anything to commend it above the medieval age, it is found in its method of actual analysis of problems, including historical situations. It is characteristic of half-intelligent logic that it insists upon clearly distinguishing institutions and atti-

tudes which are not clearly distinguishable. Inductive science is not to be set over against deductive knowledge, as if the two were hostile. The former includes the latter, and there can be no true induction without adequate and proper use of the deductive methods. So, also, the modern age is not set over against the Middle Ages in absolute contrast. Rather, the modern period includes the essential values of the Middle Ages, using those values, building upon them, and conserving them almost as carefully as does the medieval spirit itself.

But the modern age goes beyond the medieval age in certain very important particulars. Holding to the values of the past for critical and constructive purposes, the modern world insists that the inner forces of growth and life can be trusted; that, indeed, in sharp conflicts between the externalities of life and the inner forces of growth, the latter at times must win, if life is to be preserved. For this reason the modern world has set forth for itself certain great, though indefinite, goals, and has developed for itself certain constructive, though largely intangible, ideals. Over against the distinctive medieval point of view, with its belief that a fixed order of knowledge and a fixed way of looking at life are neeessary to education, we may state the informing spirit of the modern period in the following ways, all of which sum up the general doctrine of modern democraey and science that the inner forces of life and experience can be trusted:

(a) Psychologically. Impulses and feelings and the science that grows out of human living are closer to reality than are the old intellectualisms, knowledges, and fixed modes of thought. This is the real basis of modern seience, and it is the foundation of the modern hope in democracy.

(b) Sociologically. Men may be trusted to renew their institutions in the event of the downfall of any old institu-

tion, since "man is a political animal," as Aristotle pointed out. Ordinarily this is thought to mean that man must be closely surrounded by authoritative controls. But contrary to this ordinary interpretation of that Aristotelian principle, the modern world takes it for granted that institutions, including the remaking of institutions, are safe in the hands of men. Men need institutions, and whenever they destroy those they have, they will at once build others.

(c) Politically. Normal human relationships are safer foundations for the building of the state than are either the traditional political formulations or the doctrines of a supernatural order of society. Men, in their stumblings after order, may make grave mistakes; but they will probably produce no such fundamental perversions of human life as have developed under old supernatural sanctions. The good state will be, in the long run, the product of man's bravest intelligence at work in the service of his finest ideals.

(d) Industrially. Work is a necessity of life, not merely of the economic life but of the moral life as well; and men can be depended upon to share the life of work just in as far as their energies are free to follow natural channels and their training has not perverted their natural activities. The good workmen make a good social order.

(e) Religiously. The good that men achieve is their own good,—not the good that is given them by some institution. Institutions are the tools of humanity, not the final dwelling for men. Good men make the various social institutions worth while; and all institutions may rightly be called in question, may rightly be asked to answer at the bar of the individual conscience. Human life is a give and take between institutions and individuals, not a mere give on the part of institutions and a mere take on the part of men.

It may be objected that no such sharp contrast between the medieval and the modern is quite fair; and that objection may be true of the conditions of common life. But it may still be true that the ideals of the two periods, despite lack of clear distinction on our part, are still definitely antagonistic, if we take them apart and view them as fixed ideals of life. If it will not seem to be too redundant, the whole matter may be stated from still another point of view. The modern age, in its almost complete reaction from the medieval system, wants complete democracy; which means, among other things, that there shall be no inside cliques, whether in politics, economics, religion, or education. The freedom of truth, the breadth of science, the universality of art, all those somewhat elusive hopes which can be kept only by the exercise of eternal vigilance and whose function it is to break down all artificial distinctions and to release us from those primitive isolations in our own routine and folkway worlds which keep us from the realization of our essential humanity—these are in the spirit of the modern world!

In the efforts to work out these ideals and to realize them through the modern period there have been many excesses, extravagances, and recantations, bringing much suffering and showing humanity in the depths of tragic weakness. But through all these experiences, whether of littleness or of greatness, there has been a gradual exploration of the world of men, of human life and of human nature. Men have learned by their mistakes in the modern world as never before; and the more we explore human nature, the more we make use of mistakes as means of learning. But men have learned by their successes, too. Little by little progress is made. But even yet man has not learned the complete method of his own experience. Hence all too often intelligence still follows experience. Still, as in the

primitive world, intelligence may be after the event.

Of course the past is actively obstructive in the present. Institutions, attitudes of mind, systems, ideals inherited from the past—all tend to obstruct the fulfilment of the present. But this is not all to be counted as lost. The sanest intelligence of the modern world has seen rather clearly that life must be rooted deep in primitive instinct and impulse, developed through long practice, schooled in the disciplines of real experience, fed by all the streams that flow from all the ancient hills, as well as stimulated by the stirring conditions of the present. It takes all ages to make the modern age. The task of education in such an age is, however, nothing less than appalling. Its long analysis shall concern us in the remainder of this study.

PART V

THE PROBLEM OF EDUCATION IN THE MODERN PERIOD

CHAPTER XXIII

THE ELEMENTS WITH WHICH MODERN EDUCATION HAS HAD TO WORK

The general problem of education in the modern period may be briefly stated somewhat as follows: How shall the elusive energies and enthusiasms released in the Renaissance, the Reformation, and the revolutions of the modern centuries be conserved and used in developing a new social order, while at the same time the tremendous values of the older organization of society are saved? Can a modern, progressive, educational program, involving theory, content, and practice, be developed, a program which will be in harmony with this new spirit of free religion, democracy in political and industrial life, and science, thus taking the place of the medieval, static, and mechanical educational program which embodied and inculcated the spirit of authority in religion, aristocracy in political and industrial organization, and dogmatism in the field of knowledge? To be sure, these questions do not fully appear in the early part of the modern period; they are discovered as the age goes on. Modern education has not always been self-conscious; it has not fully known what it was trying to do at all times; it has been struggling in the midst of tremendous complications, trying to find a secure footing from which to survey the situation. These struggles have not been academic; they have been most real, for they involve the whole destiny of civilization. Will civilization, i.e., the mere onward moving of historic events, overwhelm intelli-

gence and escape again into the chaos of the early Middle Ages? Or will intelligence be able to rise to the high demands of the times and find an ordered way through the wilderness of the modern age? Intelligence is at work in the broad fields of scientific investigation. Shall the results achieved by scientific intelligence be lost to the uses of life? Or shall other intelligence, appreciating the meaning of science, make sure that each new generation shall share in the larger results and meet life on the advancing frontiers?

Elements with Which Modern Education Has Had to Reckon.—Modern educational effort, both theoretical and practical, has had to reckon with two distinctive types of educational elements. We must see these types in some clearness if we are to appreciate, and so share in, the actual struggle by which the modern period has won to its "present precarious position." These two types can best be described as the deductive and the inductive.

The deductive elements may be summed up as follows: The traditions, customs, and habits—the "folkways" of the past—which are still effective long after they may seem to have been broken down; the institutions of the Middle Ages which still exist in many regions untouched by the modern movement and in all lands are still influential; fixed methods of industry; manners of the common life and prejudices of all classes of people, these being more effective in control than reason; the definite philosophy of a created and completed world within which all change, if there is any such thing, must still go on; fixed systems of knowledge, dominated by Aristotle's logic, to which all new knowledge must conform; traditional representations of psychology which had made no real progress since the time of the Greeks and which supposed that the mind was molded by the objects it considered; in short, the general spirit of a fixed universe, created, complete, and logically

and psychologically finished, which the mind for its own salvation must learn, and to which in learning it must conform and submit.

The inductive elements may be summed up as follows: The impulses, energies, and enthusiasms released in the whole modern movement—the new humanity, the new antiquity, and the new world of physical nature; the spirit and hope of a progressive realization of these finer ideals; the new treasures of knowledge in all the wide-reaching ranges of exploration and investigation with telescope and microscope and compass; the new worlds of thought and action which offer new outlets to pent-up impulses and burdened populations; the expectation of the unknown in the geographical, astronomical, physical, biological, and social aspects of the world.

> 'T is time
> New hopes should animate the world, new light
> Should dawn from new revealings to a race
> Weighed down so long, forgotten so long . . .[1]

Growing out of these new elements of life there was even an overconfidence that the new age was to come by quick, sure means to the very heart of the secret of all existence. "Paracelsus is the type of a host of men who sprang up all over Europe, men of original and high ideals, but men whose undisciplined imaginations led them beyond the bounds of sober thinking."[2]

Elements which were Lacking in the Beginnings of the Modern Period.—Looking back upon the beginnings of the modern age after four hundred years of struggle and effort, still aware of "the little done, the undone vast," realizing the imperfection of the tools and methods with which the age began its long and arduous toils, the wonder grows how

[1] Browning's "Paracelsus."
[2] Rogers: "Student's History of Philosophy," p. 231.

men could ever have been brave enough to begin a task of such stupendous labor. Doubtless few appreciated the magnitude of the task that they were undertaking. Doubtless the hope, not absent anywhere, that some "secret," some "philosopher's stone," would be found by which the base substances of life could be quickly changed to social "gold" helped to inspire and stimulate the work. But it is well for us to take account of the actual lacks in the way of scientific methods and tools of precision with which that work was begun, as compared with the methods and tools with which similar work goes on to-day, remembering that the work of making and refining our tools still goes on.

What did the early modern period need in the way of tools? What must those ideals, energies, and enthusiasms for progress have that the Middle Ages did not have, in order that they might be assured permanent opportunity of development and growth? Here are some of the items:

(a) A more progressive logic than that which Aristotle gave to the Middle Ages; a logic of movement, growth, and development, to take the place of the logic of fixed conditions, perfection, and exclusion. Bacon undertook to furnish this new logic, this *Novum Organum;* but for four hundred years men have worked, at first fitfully and later more seriously, at the task of perfecting this new instrument, and the task is still unfinished.

(b) A more faithful account of the nature of human understanding and human nature in general; that is to say, a psychology which shall be true to the new elements of human nature that have come to light in this new age. The psychology of the Middle Ages was primitive and intellectualistic, but it served fairly well the purposes of the scholastics and the needs of a fixed, folkway world. But the new age, with its new interests and its new explorations of human nature, must soon find a new psychology, or come

to the end of its explorations and give over its interests. Education is profoundly concerned with this development, as we shall see. Descartes (1596–1650) may be regarded as the actual leader in this constructive movement; but for three hundred years men have been working at this task, and the work must go on for other centuries.

(c) A more thorough investigation of the nature of human society, its origin and its modes of combination, development, and control. The Middle Ages implicitly held that society existed only when held together within institutional bonds. This made of men mere puppets to be manipulated and controlled by the authorized heads of institutions. Its outcome was the feudal, aristocratic, and stagnate social order of the age. But the new age has democratic aspirations. Can a democracy be organized out of puppets? Education must become distinctly aware of this problem, for our modern world has been hindered in its democratic aspirations by the existence of an education which in theory and practice retains the social conceptions of the Middle Ages.

(d) A more fundamental theory of the origin and nature of the universe. The Middle Ages believed that the world had been created, and that it had been pronounced "very good." But the new age was feeling the impulse of the incomplete, the unfinished, with work still left to do. Can progress and movement exist in a finished universe? But does this brave new age dare to accept the theory that the universe is unfinished, still in movement, evolving out of one condition into another? Well, not for several hundred years, at any rate. But the seed of the doctrine is in the soil, and at length it will grow and break through.

(e) A complete new conception of the nature of the process of education. In a preëxistent, Platonic universe, with all knowledge already in existence, education must

consist in the simple process of learning (usually this means committing to memory) the facts. The Middle Ages carried on the formal education in this way: teachers pronounced the sentences, and the pupils took them down and learned them. But in a moving universe where knowledge is still in process of coming to be; where impulses and enthusiasms and energies and ideals and purposes that have received no fixed status as yet, exist; where new humanities and antiquities and worlds of nature are discovered; where new logics and psychologies and sociologies and philosophies are coming into being,—shall educational processes remain stagnate, stationary? Shall the formal, pedantic, and barren intellectualisms of the old social order suffice for this new world of struggle and effort after something better? Shall education linger far in the rear of the world's progress, or shall it keep step, keep time, keep spirit with the new? Little by little the world becomes aware of the fact that democracy itself can never win to a secure position in the actualities of the world so long as our educational conditions, our theories, our practices, and our administrative controls of education remain autocratic.

Briefly, we may sum up the problems of the modern world-period by suggesting that progress in the realization of these great democratic ideals will depend upon the working out of the more perfect tools of science; a logic that is able to escape from scholastic presuppositions into the actual freedom of intellectual adventure; a scientific method of the same general sort, with the addition that as the centuries go by ever finer modes of control will be developed, including the laboratory method; a theory of experience that will lend itself to a more faithful psychology; a less mystical conception of the nature of knowledge and a willingness to make use of knowledge in the reorganization of the conditions of living; a natural theory of the origins and

relationships of society; and a much more intelligent appreciation of the processes of experience which are involved in education. The nature of the universe, of society, of human nature, of the human mind, of the processes of knowledge, of the processes of education—these are all to be investigated and new theories concerning all of them are to grow up. The modern period does not merely develop more *things;* it is a different kind of a world, and it looks at all things in a different sort of way.

The task of education, therefore, will be seen to be a very different sort of task. The fatal defect in much of our modern education is that it does not know we live in this different sort of world. To all too great an extent educational procedure goes on in the spirit of the Middle Ages, or some Protestant restatement of the Middle Ages, without reference to the modern background. We must come to see our modern educational tasks against the background of these modern world-movements in science, democracy, and the love of freedom. Undoubtedly these are revolutionary movements; they are so presented herein. We live just now in a world of revolutions. But there is need of education in such a world, in order that the revolutionary spirit may be drained off into the spirit of a progressive evolution. Modern education, in schools and elsewhere, must be made to be a conscious effort to realize in the actual life of childhood and growing youth the rich results and the mighty spirit of the modern world of science and democracy.

What has been done along this line in modern centuries? What still remains to be done? To these aspects of our problem we must now turn.

CHAPTER XXIV

THE TRAGEDY OF HUMANISM IN THE POST-RENAISSANCE PERIOD

With the substantial break in the structure of medievalism which came with the Renaissance came disillusionment as to the value and significance of the traditional education, —its aims, its materials, and its results. The question of method was scarcely raised as yet. But in the presence of the failure of this old social order and the disillusionment with reference to its educational system, which way can the world turn to find its new means of education?

Three Possible Outlets.—We have already seen that the new emotional experiences of the Renaissance opened out avenues of exploration in three new directions, viz., toward classical antiquity, toward the social world of the age, and toward the world of nature. Each of these avenues is eventually to become the line of a promising constructive activity; each of them is to become the basis of an educational program which shall seek by extreme vociferation to monopolize the whole field of study. But for a time the last two are too dimly perceived to be seized upon. The Renaissance, as we have seen, devotes its whole energy to one great enterprise: it will become acquainted with that great past of beauty, poetry, and humanity which lies before the dreary ages of medievalism; it will renew its youth at classic springs.

What was Humanism?—Humanism was an appeal from the barren intellectualisms of the Middle Ages, which gained their hold upon men through professing the power

of determining and controlling eternal destinies, to the richer life of the emotions, feelings, impulses, and social fellowships of the human world, especially to those noblest expressions of that rich life of emotions, feelings, impulses, and fellowships which is found in the classic literatures. The humanity of men came to a new birth in the Italian cities; it found its justification, its support, its criticism, and its fulfilment in the humanity of the old Greek world. It was fed upon the learning of the ancients; it realized its own more complete development by that vitalizing touch and the complete absorption into the life of that older world, which was "perhaps the most completely human social order the world has ever seen," despite its defects and limitations. At its best, while the old, free, emotional spirit played through it, humanistic study and education did really reproduce something of the liberality of life and nature of the old Greek world. The Italian cities fostered the new spirit; the tyrants of the cities set up the new schools of humanistic learning, thereby making their own uncertain positions more secure. Especially was this the case at Milan, where the Visconti held power, and at Florence, where the Medici ruled in royal state.

The best type of these schools, perhaps, was that of Vittorino de Feltre, which he established at Mantua about 1424. The humanist aim, as it appeared in this school, was the "harmonious development of the mind, the body, and the moral life,"—that balance of all bodily and mental powers which should be the character of the free man, the human being, and which had expressed the Greek ideal of a liberal education. The life of action was included in this ideal; for the human was distinguished from the pedant in no respect more profoundly than in this, that he found the real test of life in action, rather than in mere intellection.

Inevitable Tendencies.—But as we have seen, while this

new age found new emotional outlets and new materials of great value, the question of the method of education was scarcely raised. As long as men felt the fresh glow of enthusiasm for the beauty and poetry of the humanities, something of the spirit of humanism pervaded the actual school and overflowed even into the very method of teaching. Vittorino held himself to be "the father of his pupils," an attitude profoundly different from that of the intellectual taskmasters of the medieval schools. But this attitude was an enthusiasm, a sentiment, growing out of his enthusiasms for the materials with which he was dealing. It was not, —in the state of psychology, it could not become,—a reasoned program of teaching procedure; but as a mere sentiment it must gradually dissolve and disappear, if not in Vittorino himself, then in those who came after him. Not only was this so, but the whole humanistic movement was predominantly an emotion; and when it tried to state its aims and methods in intelligent terms, because it did not realize that a new outlook upon the world implies a new type of logic and psychology and because no such new type of logic or psychology was as yet in existence, humanism fell backward toward the formalism it professed to abhor. The implicit method of this humanistic education was still the method of medievalism; and in the absence of corrective intelligence our implicit *methods* of thinking will control and organize after their own fashion the most obdurate *materials* of thinking. The only possible chance for humanism to endure lay in its ability to develop a humanist logic with which to displace the machine-logic of Aristotle. This it could not do; hence it fell a victim to the very system it professed to despise. We must see how this happened.

The Degeneration of Humanism.—The generous enthusiasms and high emotions of the first generations of the new

age were the refined product of the purifying influences of these classic materials. What was more natural than to assume that these classic materials could produce these nobler forms of living and thinking age upon age? At any rate, such an argument arose and became the educational doctrine of the period in a dominating sort of way. And out of this doctrine, generation by generation, there flowed a stream of strange and unforeseen consequences. For the argument developed unexpected turns and windings, and it led to an outcome that would have been abhorrent to the spirit of its beginnings, if that outcome could have been foreseen. Let us follow the argument through its various stages. We may phrase it as if the spirit of these successive generations were voicing their several contributions to it:

Contact with these classic materials has refined and purified these two or three generations of the fourteenth and fifteenth centuries; hence the same experience will refine and purify and exalt any generation. Let us therefore make our whole education out of these classic materials. Greek and Latin shall be the intellectual nourishment of all the coming generations; thus shall we assure ourselves that all these coming generations shall have refined, purified, and ennobled characters not unlike our own.[1]

But the classic literatures are not easily accessible. We must study the language before we can reach the literature with its liberating content; hence the curriculum must go back of the literature to the primary study of the languages, not, of course, for the sake of the languages, but for the sake of getting at the content that is locked up in the languages. In the long run, of course, the study of these languages will lead us back to the literatures; and

[1] Cf. The Curriculum of Sturm's Gymnasium: "Monroe's Text Book," p. 391.

then mastery of the literatures, made possible by the mastery of the languages, will unlock and unfold our own struggling impulses and originalities.[1]

Again:

But the Greek and Latin languages are contained within the niceties of grammatical construction and idiomatic usage; grammar is the actual clue to the understanding and mastery of language. Hence our curriculum must be primarily made up of the study of grammar, not, it is obvious, for the sake of the grammar, but for the sake of the language, which is to be the key to the unlocking of that liberal content which is hidden in the literatures and which is to purify and ennoble our spirits, our struggling feelings, and emotions. In the long run the study of grammar will unlock and unfold the classic languages and give us free access to those classic literatures in which we shall find what our souls most need.

Finally:

But not all literature is of the finest form; not all language is of noblest mold; not all grammar is worthy of study. Even in these classic fields there are obvious gradations of values. Evidently it will be a waste of time, as well as a source of possible danger to our future characters, if we shall devote ourselves to these classic authors at random. Let us spend time on none but the highest and most worthy. Who is that highest and worthiest? Can there be doubt in that subject? Who, indeed, but Cicero, —Cicero, the incomparable orator, the admitted master of perfect Latin style? Let us boldly adhere to him, the highest. Let us "discard all subjects that do not admit of being discussed in Cicero's recorded words."

So, by these stages of argument, we reach the anti-climax and the lowest levels of humanistic decadence; we come to

[1] Cf. Roger Ascham, "The Scholemaster" (1570).

"Ciceronianism." This may seem like a caricature, but it is simple, sober, historic fact. We must study the perfect grammar of the noblest Latin as that appears in the writings of Cicero; this will bring us to the perfect language of the classics, by means of which we shall be able to read the liberalizing literatures of the ancient humanities, by means of which our needy souls may be refined and purified. The educational doctrine underlying this decadent movement is to be stated in some such way as this: "Since all the great spirits of the ages have passed away, the hope of the world lies in imitation. Imitate, therefore, but imitate the best!"

An incidental result of this doctrine is to be found in the fact that such imitation rarely gets beyond the slavery of a literal study of the mechanics of language. Hence at that period, and in large measure ever since, the *language* and *grammar* of the Greeks and Latins have stood between the modern man and any real contact with the classics. There has been a sort of prejudice against reading the classics in English translations; and very few have ever penetrated *through* the original languages to the content of their message.

The Educational Status of the "Ciceronian."—The fully developed Ciceronian attitude belongs, educationally, back in the shadows of the Middle Ages; its essence is not modern and scientific, but medieval, pedantic, and scholastic. The Ciceronian ought to have been a warning to his own age and to later ages; but neither his own age nor the later ages learn much from warnings. But if the warning could be understood, it would run something like this: No mere material can be called either medieval or modern; any sort of material lends itself to any sort of organization or presentation. The only hope of the free intelligence, the free emotional life, and the free social order which seemed promised in the Renaissance, is to be found not in

materials at all, but in the development of the actual logic of a liberal life, of a freed intelligence, of a democratic social order. The fundamental educational question of the modern world is to be not What shall I study, but How shall I know what I do know? Shall I know it as if it were a final and unchangeable fragment of a complete and changeless universe? Or shall I know it as if it were but an item in the growth of an unfinished and incomplete universe of experience?

But of course no such abstract question appeared to the people of the times, not even to Erasmus who satirizes the movement in mighty fashion. It was an age grown weary of enthusiasms, ready for the refuge of formalisms that made thinking unnecessary, even ready to be happy in what Milton calls the "asinine feast of brambles and sow-thistles" on which the age attempted to nourish itself. And the sixteenth, seventeenth, and eighteenth centuries complacently accepted such formal educational practices as natural and proper; that is to say, the school-men did. We may be thankful, however, that tendencies and energies were deeply at work all through those centuries which were to change completely the current of this complacent acceptance of the lifeless and formal and bring back once more to earth enthusiasms for real humanity which, being constantly renewed from generation to generation, survives all degenerations of the humanities and goes on to new expressions of its endless energies and variety. The coming revolutions in politics, economics, religion, and science will throw into relief new aims, new materials, and especially new modes of living and thinking, which will gradually leave the old pedantries behind and make even a new education necessary.

Leaving humanism to follow its own course to the end, we must turn to the next answer of the age to the insistent educational problems.

CHAPTER XXV

PANSOPHY AS AN EDUCATIONAL PROGRAM

We have already noted the tremendous developments of new knowledges in the many ranges of new interest that came in with the new age, partly as cause, partly as effect of this new movement. We have seen that when the Renaissance was confronted with the intimations of rich developments of knowledge along the three great lines that emerged in that time, it turned its attention very largely to the one dominant interest—classical antiquity. It chose as its answer to the question, now that the medieval structure of education is gone, what shall we do along educational lines, this one great field as inclusive of humanity. We have seen the tragic outcome of that choice. Nothing is inclusive of humanity that falls short of all that humanity has done and can hope to do. So the world must seek for a new and more inclusive ideal and program. Is it not possible to include all three of these aspects of the world—antiquity, society, nature—in one all-encompassing aim?

Encyclopedism.—From the days of Plato the efforts of school-men have been directed to the construction of a curriculum that should be inclusive of all knowledge. During the Middle Ages the "Seven Liberal Arts" included substantially all learning, as we have seen. And as long as the search for knowledge went on under the strict censorship of the medieval authorities there was little danger of the escape of any knowledge beyond the boundaries of the accepted curriculum. Quintilian speaks of this universal circle of the sciences which constitutes all knowledge as

"encyclopedia," and throughout the Middle Ages extensive works treating of all the known departments of knowledge were published.

But with the dawn of the period of discovery, exploration, and investigation, knowledge overflowed the channels of the "Seven Liberal Arts," the "enclycopedias," and all other fixed organizations of the sciences. Scholastic study attempted, however, to keep the straight path of the traditional seven; and the humanistic education of the Renaissance, as we have seen, limited its interests to the classics, growing more and more restrictive as the years went by, until it ended in the narrow groove of Ciceronianism. Neither the dogmatic ideals of the scholastics nor the barren formalism of the humanists could really satisfy the new world in the midst of the unceasing developments of knowledge. Encyclopedism again emerges as the educational ideal, broadened now to include all the new knowledge and with a new name, freeing it somewhat from invidious memory. That new name was—

Pansophy.—Bacon was largely responsible for the emergence of this conception as the new ideal of education. Bacon was a strange mingling of characteristics. As we shall see later, he was largely responsible for the beginnings of that new method of study which is now called scientific, as distinguished from the scholastic. But his first essay into the field of education shows him as the advocate of the doctrine that the human mind can encompass all knowledge. His "Advancement of Learning" attempts to organize all existent knowledge so that the mind can absorb it all. His own famous remark is, "I have taken all knowledge to my province." But on the other hand, the new method which he was to inaugurate has shown the world that the particular human mind cannot encompass all learning. And other developments of the centuries since Bacon show that edu-

cation is something other than quantity of knowledge; that all learning is not essential to education.

Comenius.—The great educational exponent of the Pansophic ideal was John Amos Comenius (1592–1670). Though usually presented as an exponent of sense realism, he stands especially as an advocate of the possibility of teaching all things to all men, though he would limit "all things" to those real things which actually nourish the mind, as distinguished from the verbalisms taught in these schools of his own time. These he calls "slaughter-houses of the mind," "places where the mind is fed on words." The title of his great work, "Didactica Magna," shows him as the advocate of the pansophic ideal: "The Great Didactic setting forth the whole art of teaching all things to all men, or a certain Inducement to found such schools in all the Parishes, Towns, and Villages of any Christian Kingdom, that the entire Youth of both Sexes, none being excepted, shall quickly, pleasantly, and thoroughly become learned in the sciences, etc." Another of his works was called "Pansophici Libri Delineatio." He projected a work to be called "Janua Rerum sive Sapientiae Porta," which was to have been of the nature of a universal encyclopedia, a complete statement of all that had been accomplished within the field of human knowledge. Though the real significance of Comenius in the history of education does not rest upon his pansophic conceptions and efforts, we are concerned with him here in that light alone; and while this presentation of his work is one-sided, it is necessary, in order to give a true representation of this particular ideal which for a time held the attention of the scientific world.

Pansophy in England.—Bacon had begun the encyclopedic movement in its general modern aspect; Comenius was the chief educational representative of this ideal.

Hence he was invited to England to present to Parliament his plan for a *Collegium Didacticum,* or *Pansophicum,* which was to be a sort of universal scientific laboratory and clearing-house for the sciences of all nations, modelled somewhat on the plans of "Solomon's House" which Bacon described in his "New Atlantis." This was in 1641. Before anything definite could be undertaken, the great civil war broke out and all such projects had to be abandoned. But Comenius joined with Samuel Hartlib and John Dury, friends who had been instrumental in inviting him to England, in working out a scheme for an "Office of Address" to be located in London, which was to become a national bureau of help to the poor, securing employment for them. This was also to be a means of preventing further divisions in religious organizations, an instrument for the advancement of learning and the founding of schools, and a clearing house for the learned of all nations, receiving and spreading information about scientific achievements, particularly inventions, so that all the world might be served by any new discovery anywhere worked out. This "Office of Address" was an institution something like the Bureau of Education in the United States. It shows the great hopes of the age—the encompassing of universal knowledge, the organization of universal international relationships, at least in knowledge, and the eventual unification of the Christian world.

The End of Pansophy.—Efforts to carry out the ideal of pansophy did not cease with the departure of Comenius from England. But the details of those further efforts need not delay us here. The developments of knowledge were too great; no mind could compass all. At the same time the developments in logic and psychology roused the suspicion, though it was still too early in the history of these developments for this to be much more than a sus-

picion, that education does not depend upon the amount of information which one absorbs, but upon something else. So that John Locke wrote, in a treatise published after his death in 1704, words to the following effect: The extent of possible knowledge is so vast, and the period of our life on earth so short, and the avenues by which knowledge enters the mind of man are so narrow, that a long lifetime is not sufficient to acquaint us not merely with the things which we are capable of knowing nor with the things which it might be convenient for us to know, but even with the things which it would be very advantageous for us to know. Locke here shows how educational thinking was taking the place of traditional ideas and ideals about quantity of materials. This may be a very crude division of knowledges, and one having little scientific validity, but it indicates that analysis is beginning; and analyses will open the way to the new world of valid and lasting distinctions. Locke, himself, had earlier conceived education, as we shall see, as having more to do with the "conduct of the understanding" than with the compassing of a certain amount of information in memory. At any rate, the discrediting of pansophism brings to an end a theory that regarded the mind as a sponge and education as a process of filling it up with knowledge in the nature of universal information From this time forward educational thinking must seek other avenues of constructive endeavor. Encyclopedism is too easy, despite its difficulties. Mere accumulation of bulk information does not make a mind, just as mere piling up of grains of sand does not make a world.

But as we stand in the midst of this period of uncertainty, we seem to be facing an insurmountable barrier. Humanism fails, despite all our hopes; pansophism palls upon us, as overfeeding on a hardy man. Which way shall we turn? Shall we try to sift out the growing masses of knowledge in

the hope of finding some magical material that will succeed where the humanities failed? Shall we try to get underneath all knowledge, regarded simply as facts, to a consideration of the real significance of knowledge as a factor in the development of mind and as a tool in the organization of social life?

At any rate, pansophy has shown the limitations of any theory of education which depends wholly upon general subject-matter. Henceforward educational thinking must begin to make some sort of real distinctions within the general field of these other assumptions of universality. This at least pansophy has contributed to the world.

Leaving that aspect of the subject, then, we turn to the new developments.

CHAPTER XXVI

THE NEW METHOD OF BACON

When the question was raised, What shall we do with all these overwhelming treasures of new knowledge the scholastics had replied, "Ignore them or compel them to submit to official classification"; the narrow humanists of the Renaissance had replied, "Choose the perfect materials from among the mass—choose the classics"; and an imaginative group of men, the pansophists, with their faces to the future and with boundless belief in the elasticity of human intelligence had replied, "Choose all, learn all; become universal minds!" But each of these replies is basically unintelligent and therefore offers no real hope to the world. If the future is to find a pathway of freedom and intelligence out of the common world where the ignorant dogmatisms of the scholastics, the emotional prejudices of the humanists, and the boundless gullibility of the pansophists all exist side by side, some new and as yet unrealized, even unsuspected method of progress must be discovered, some outlet upon some undetermined field of knowing or some new interpretation of experience. We find the beginnings of this new method in Bacon's efforts to establish inductive science.

Bacon Breaks with the Past.—Bacon began this phase of his constructive work by breaking away from the traditions of the past and by criticizing not so much the materials, but the method, the logic, of the past. Of course in Bacon's time (1561–1626), the emotional and religious conflicts had already been accomplished in the Renaissance and the Reformation; and a very great deal of actual sci-

entific work had been carried through. For example, Copernicus had overthrown the old Ptolemaic universe long before Bacon was born; Kepler was working out his laws of planetary motion in the same generation with Bacon; and before Bacon's death the invention of telescope and microscope had revealed to the world the existence of the infinite and the infinitesimal universes, while in the former realm Galileo was working out the foundations of mechanics with the demonstrations of his laws of falling bodies. But practical investigation may go on for a long time before it becomes aware that it has departed very far from the logic of old orders of knowledge. And it may take some one from outside the actual field of practical work to discover the new method that is being more or less unconsciously followed by the practical workers. Bacon was not much of a scientist himself, if by scientist one means observer; but Bacon was the first of men to perceive the actualities of a genuinely new method in this work, and in this particular he is the greatest scientist of his time, the "Father of Modern Science," even though he neither clearly saw nor definitely stated the method.

But for the most part the science of Bacon's time was not of a high order, as he himself declared; it gave men neither the knowledge of things nor the power of control over them. And for Bacon "knowledge is power"; that is to say, the only knowledge that can be counted for science is knowledge that actually increases man's power of control over nature. Hence we must break with the whole structure of scholastic science, especially with the methods of old knowledge, i.e., scholastic logic, and look for a new method, a *novum organum,* with which to build up the new structure of science that can be depended upon.

The Distempers of Learning.—Bacon points out three common defects in science, or, as he calls them, "distem-

pers'' in the learning of his times. The first he calls ''fantastical learning,'' by which he means the whole range of pseudo-science, alchemy, natural magic, old wives' tales, credulities, wonders, ghost-stories, miracles, and impostures of all sorts, which the age had inherited from the ignorant past and which it garnered and conserved as precious treasure, but which stood so obstinately in the way of valid science. And it still stands! The second of these distempers he calls ''contentious learning,'' by which he means the sort of knowledge professed by the scholastics. This is not knowledge at all, but endless disputations about questions which, while once important, have lost all their significance. ''The fable of Scylla,'' he says, ''is a lively image of the present state of letters, with the countenance and expression of a virgin above, but ending in a multitude of barking questions, fruitful of controversy and barren of effect.'' The third of these distempers is what he calls ''delicate learning,'' referring to the dilettante spirit of the Renaissance, which had some considerable vogue all over Europe and which was verbal, rather than real, and stylish and polished, rather than socially substantial. So long as the mind is affected by these distempers, or so long as learning is dominated by any one of these three types of defect, there can be little hope for real science. How shall learning escape from these limitations? And at the same time how shall we be able to find our way through the new materials that are being discovered, distinguishing true from false and building the substantial structure of science? More than this, how shall we be able to fill in the gaps in learning, actually digging out from the unknown the information that we may need to make complete our knowledge in any particular direction? The answer is the same for all: By the new method.

The Method of Inductive Science.—Induction, for

Bacon, means first of all learning from nature herself. It means coming to nature with an open mind; it means the gathering of a mass of particulars, the facts of sensation and perception, individual impressions seen clearly and exactly and with the help of instruments, if such exist; it means careful progress step by step toward the universal that is involved in these carefully observed, ordered, and criticized particulars; it means leaving the universal propositions so gained open to future reconstruction, thus keeping the system of knowledge open to future growth; it means testing conclusions by experiment, thus bringing the conclusion back close to the actual source of all real knowledge; it means making sure that all "instances contradictory" have been carefully considered. Eventually, so Bacon thought, science would be able to exhaust the sum of particulars in the world; and when these particulars have been tabulated, organized, and brought to their proper universal conclusions, we should be getting at the ultimate forms or "essences" of things, i.e., knowledge, itself. He gives us an example of the new method. He undertakes to find out what is the essence of heat. He collects a large number of instances of heated objects and proceeds to search for the quality or essence common to all these objects and manifested in the experience of heat. With a good deal of ingenious argument he reaches the conclusion that the "essence" of heat is motion.

It is obvious to-day that while Bacon's conception of the inductive method was by no means complete or correct, it made a revolutionary break with the contentious and deductive attitudes of the scholastics; and it offered a stern rebuke to the delicate and no less deductive attitude of the humanists. But it will take centuries after Bacon before the full significance of this new method becomes apparent for natural science, to say nothing of its meanings for the

social and educational sciences. But we must now ask, Why does such a straightforward method fail to take quick hold upon the imaginations of men of intelligence? Bacon saw that his work would not succeed at once, and for very clear reasons. He describes these reasons under a striking comparison with idols; men's minds are so bound up with the worship of old idols that there is no present chance that they will care to take up this new method. What are these idols?

Bacon's Idols.—The mind of man is not free to follow new methods in the search for truth. The mind has become subordinate to conditions of its own methods, to fears of its own establishing, to idols its own hands have made, as we saw in the folkways. Induction demands that the mind shall start with no prejudices or presuppositions, or so Bacon thought. But since we are in the power of these idols, there seems to be little real chance for the inductive sciences.

The first of these idols he calls the "idols of the tribe." By this term he means certain prejudices and presuppositions common to the whole race, e.g., the fear of anything new. This is a genuine folkway attitude, an idol remaining from the primitive world. The second of these idols he calls the "idols of the cave," i.e., presuppositions which belong to the individual alone. "For everyone, besides the faults he shares with the race, has a cave or den of his own which refracts and discolors the light of nature," e.g., the "ideals of a gentleman." The third group he calls "idols of the forum," by which he means the controlling influences that inhere in words. "Men believe that their reason governs words, but it is also true that words, like the arrows from a Tartar bow, are shot back, and react upon the mind." Such a word as "coward" exercises remarkable influence over men's actions. The fourth of

these idols he calls the "idols of the theater," by which he means the presuppositions and prejudices that come through the influence of current systems of thinking which are not real, but "stage plays, representing worlds of their own creation after an unreal and scenic fashion,"[1] e.g., the fear of socialism.

Bacon insists that all such obstacles to learning shall be cleared away, especially all the scholastic philosophy which is made of words and has no genuine relation to the truth of nature. In this cleared ground man must begin in humility, reverence, and charity to work for that genuine knowledge which is to relieve the sorrows and distresses of men, to do away with darkness, and to purify the understanding of the race.

The further study of the principle of induction does not concern us here. Bacon fought for it valiantly, albeit in a compromising way. He failed to establish it as the working method of science. He made a real impression upon the age, but his method seemed, even to those who were already using it, far too revolutionary and impractical.

In fact, Bacon's induction is very imperfect. An inductive method is not wholly inductive in a literal sense; it is but a different mode of stating the general deductive method. But Bacon had little room for old knowledge; his "idols" included practically all old materials, and these he would ruthlessly sweep away.

He did not recognize the value or place of hypothetical thinking in science. He supposed that collecting of data and organization of knowledge could go on in a factual way without thinking, without a guiding program in the mind, without presuppositions of any kind. He did not know that a mind does not work when it is empty. He

[1] "Novum Organum," Section 68.

did not realize that the one great difference between scholastic philosophy and inductive science consists in this: in scholastic philosophy the presuppositions of knowledge are held dogmatically as elements in a fixed system, while in inductive science the presuppositions are held as hypotheses subject always to the test of critical experiences.

Bacon failed; but he began a task that still persists through the ages. Meanwhile his failure throws the school-world back upon the *materials* of education in a new and more complete sense. There is nothing now left to do, but to sift out these materials and use the best that can be found in the old dogmatic ways. We turn to these processes of sifting. May we here find the clue to the eventual solution of our problem?

CHAPTER XXVII

SIFTING THE MATERIALS OF EDUCATION

THE problem of method in scientific progress or in education is rather too abstract to interest many people long. The search for method, or for methods, seems remote, unreal, academic. Practical men soon give over this search and turn their energies to the concrete aspects of a problem, usually to the handling of the materials that are available. Hence the solution of most of our problems has been practical, and therefore materialistic, i.e., in terms of materials, rather than methodical, theoretical, and illuminating. But we have already seen that the masses of materials available for education had grown too great for any one individual to master, or, indeed, for any one system to encompass. Hence those who once again turn to the materials of education for their answer to the problems of the age are compelled to begin a process of sifting their materials, selecting those which seem most worth while, and most likely to fit the needs of the educational situation as they conceive it.

Let us note at once, however, that the process of choosing materials is something more than the mere taking of certain sorts and of leaving the rest. It involves the more or less consciously held presupposition of a point of view, a conception of aim and means; so that, despite himself, the most practical man inevitably shows attitudes, outlooks or prejudices, and methods,—even method,—in the choice of his materials. The difference between the practical man and the theoretical man is simply this: the theoretical

man knows what his theory is, and is therefore in a position to criticize and correct it; the practical man does not know what his theory is (though he has one, implicitly, at least), and therefore he cannot criticize his attitude toward his problem by the mistakes in his practice. Neither can the latter criticize his practical mistakes by appeal to any more ultimate theoretical understanding. He is lost in the mazes of traditional practice; he is isolated in his own fixed habits. He can merely fall back from one habit to another.

Still, for very insistent reasons, the world turns from the theoretical man and follows the practical man. So it came about in the seventeenth century that the work of Bacon was largely ignored. The problem of scientific method seemed very remote from reality, even as it does still.[1] The problem of finding satisfactory educational materials that would serve the purposes of the age seemed much nearer to reality and to practical common sense than the search for a new method. The seventeenth century becomes a period of sifting and organizing materials; but, as we have already noted and as we shall later see, this sifting and organizing process carries much farther than is at first foreseen.

Historic Basis of this Sifting Process.—We have already seen that during the Renaissance three rather distinct aspects of the new, modern world came into prominence. These three aspects were: first, that inner, emotional, and personal world of joy of living in the present which found its fulfilment and its support in the Greek and Latin classics; second, the outer world of human life, the society that is all about us, as over against the deferred heavenly society of medieval promise; third, the new world of external physical nature, revealed even more

[1] The present war seems to be making research more real.

wonderfully in the seventeenth century by means of the telescope and microscope. These three aspects of experience seem to have stood forth rather distinctly in the full flush of the Renaissance. They seem to be fairly distinguishable in a practical way, even in ordinary language, and they are capable of becoming the bases of the sifting and organizing of the constantly increasing masses of educational materials.

That is to say, in the seventeenth century three rather distinct types of educational program arose, each basing its claims to preference upon the worth of the kind of educational materials proposed. One group held that the problems of education in this new age could best be solved by a school curriculum made out of the materials of the classics; a second insisted that the conception of school connotes a certain bookishness which has been too often confused with education, whereas the only sure and fundamental materials of education are to be found in the actual experiences of living among men, or in the study of those vital subjects which mean something to men of affairs and which have not yet become lifeless by being incorporated into the curriculum of the school; and a third group found the clue to all worthy educational effort in the realities of physical nature, as opposed to the verbalisms and pedantries of the schools and the artificialities of the social world in general.

Each of these parties put its emphasis upon a selected and typical material. In that sense, each was *materialistic.* That is to say, neither of these programs avowedly raises the question of method. To this extent they are all at one with the materialism of the Middle Ages. But we must not fail to note that, although the upholders of these various programs did not seem to realize the fact, this very principle of selection of certain materials eventually

does throw the whole problem of educational progress back into the field of method. That is to say, the only solution of the problem of materials is in appeal to fundamental method. This will be the great gain from this period of partisanship. At this earlier time, however, the emphasis is all upon types of material. Education is materialistic, just as it was in the Middle Ages; the liberating and illuminating effects of modern theory have not yet been felt. We must now consider these three types of materialism in some detail.

(A) CLASSICAL MATERIALISM, OR HUMANISTIC REALISM

We have already seen how the fine realities and finer hopes of the Renaissance were slowly destroyed through the growth of that seemingly inevitable literalism and pedantry of the later period, the period of the narrower humanism. We have seen how all the genuine life of the classics escaped under the influence of this degenerative process, until nothing was left of that original beauty and promise but the vocabulary of Cicero. Out of all the world of wealth of classical antiquity nothing remained but the verbalisms of a Latin grammar based on a single authority. This was the absolute end of reality; it was the apotheosis of the meaningless and the unreal. But of course such devitalizing tendencies cannot forever control human activities; there is too much real beauty and life and light in the classics for such a fate.

Realism versus Verbalism.—Something of the conception of the earlier Renaissance was bound to be restored. The delusion that the purpose of education was the forming of young Ciceros was bound to run its course. It had, indeed, shortly run its full, destructive course. In its place there was now to come, in the seventeenth century, that fine and noble conception that men may come most

fully to know themselves, their own period of history, and their own proper places in the world, by rising into the present through the mastery of that most human chapter in all history—the period of classical antiquity. This could be done most satisfactorily, of course, through the mastery of the inner life and spirit of the classical literatures. Such a conception had a secure justification, too. The new age, as we have seen, was more and more complex in all directions,—industrial, political, religious, and intellectual. It seemed impossible at the time to grasp enough of these divergent complexities to make possible a real mastery of the immediate age. Some other method of mastery seemed necessary. The classic world seemed to furnish this clue. The ancient world was quite as complete in its essential humanity as the modern; but at the same time that ancient world was much simpler in detail, less distracted. It seemed not impossible that a real understanding of the essentially human (which would open the way to a mastery of the present) could best be found in those older literatures, provided they were studied for the sake of the life that was in them, for the sake of an acquaintance with the rich life of the Greeks and Romans, rather than for the working out of endless grammaticisms.

That is to say, if the classic materials could once more become real, they could once again bring us to humanity, just as they originally grew out of humanity. So we come to that new period in classical education, the period of classical realism as opposed to the period of classical verbalism. Literatures must be read for their revelations of life, for their setting forth of the universal humanity, and not for their use as illustrating pedantic abstractions in grammar. It is the living content of the classics, not their abstract form, that makes them the supreme ma-

terials for educational purposes. Greek and Latin grammar must no longer be allowed to keep the needy world from the nourishment that is to be found in the classical literatures.

Leaders of the New Movement.—After Erasmus (1456–1536), who was always an opponent of the narrowing tendencies in education, but who lived before the times of this realistic movement, the two great names in the newer developments of this broader humanism are Rabelais and John Milton. Rabelais was, indeed, but a little later than Erasmus,—that is, he was born in 1483 and died in 1553. He was not a teacher in the schools; he was a monk, a lecturer on anatomy, a physician, and a writer. He is, of course, best known as a writer. His satires had tremendous influence. His "Pantagruel" and "Gargantua" are bold and novel characterizations of the age in which he lived. But Rabelais was himself not a wholly liberated man. We have spoken of this period as being still predominantly materialistic. Rabelais shows this clearly. He was a violent opponent of the scholastic verbalisms that made up the education of his period; he satirized unmercifully the education that could turn out such an utter failure as "Gargantua." Yet in his whole process of reëducation Rabelais never gets away from the books.

John Milton (1608–1674) is the truest representative of this realistic movement. His "Tractate on Education," published in 1644, sets forth in striking fashion the best educational ideals of the age from the standpoint of the classical tradition. Milton was the poet of the revolution in England and was in sympathy with most of the ideals of the revolution. But in the midst of the revolutionary period he was compelled to turn from literature to schoolkeeping. He was a master of a small, private school for seven years, and he was able to do wonders in the way

of inculcating learning into his select pupils. Like certain modern writers, however, he generalizes his experience a little too conclusively when he insists that his method of teaching would prevent the waste of seven or eight years now spent merely in "scraping together so much miserable Greek and Latin," for in that time he would give to boys "a complete and generous education, which fits a man to perform justly, skilfully, and magnanimously all the offices both private and public of peace and war." That is to say, Milton assumes all too readily that any teacher can do with any pupils what he did with his few select pupils. But that is not his most grievous error. He, also, like Rabelais, clings to the books, and to the Latin and Greek books. He despises all the modern movements in education, such as those represented by Comenius, etc., except this one movement to transform the teaching of the classics. He wants to escape from words, from the "asinine feast of sow-thistles and brambles," to real things; but the real things must come through the Greek and Latin literatures in which agriculture, architecture, and all the rest of the subjects worth studying were treated masterfully by the authorities of old, only they must come as pleasant occupations from which it would be difficult to "drive our dullest and laziest youth, our stocks and stubs . . . from the infinite desire of such a happy nurture."

The Outcome of Classical Materialism.—We must take leave of the subject at this point for the present. We shall come upon it again at a later time. We shall then see something of the tragedy of the story of the classics. Perhaps it is the heritage of the thousands of years of use as materials; maybe it is the inevitable result of the classical tradition; whatever the cause, the classics seem to remain fixed in their seventeenth century aloofness. Nat-

ural science and psychology have come to transform the world of experience and the theory and practice of education; yet the classics still insist upon being the "preëminent materials of education." There is, to be sure, a certain attitude of mind, a certain historic orthodoxy which sustains this classic tradition. But in an age when the world needs the sustaining energies of all the resources of humanism it is a little bit unhumanistic for the classical materials to hold themselves apart from the world, demanding a special recognition for their superior values.

(B) SOCIAL MATERIALISM

Over against the humanistic realists who proposed that Greek and Latin should be rescued from their Ciceronian narrowness and made to serve the purposes of a broad and rich modern culture and an introduction to the world's life, we must next observe the representatives of the somewhat startling doctrine that education should prepare the individual to become a man of the world. Of course this emphasis in education is very old. Plato and Aristotle had insisted that education must fit men for their place in civic life. All through the Middle Ages certain classes of society were recognized as having peculiar relationships to human welfare, and these, who were to become the rulers, were supposed to receive an education fitting them for their particular activities. During the later Middle Ages and in the early modern period treatises on the education of princes, rulers, or governors were frequently published. Later, as monarchies of the older, absolute order began to break down and the new aristocracy arose, especially in England, the education of these new classes became a matter of social concern. Hence the books on education begin to concern themselves with the education of the nobility, and later still the education of the gentleman becomes

the greatest task of the state. Even as late as the time of John Locke we find this ideal rather succinctly set forth: "That most to be taken care of is the gentleman's calling; for if those of that rank are by their education once set right, they will quickly bring the rest into order."[1]

The Doctrines of Social Realism.—But the sixteenth and seventeenth centuries saw the development of a somewhat broader conception of public education. Deep in the soil of the common life democratic impulses were beginning to show signs of activity. It was still a long time until the world should be willing to base government upon the consent of the governed; it was a longer time until the world should fully recognize that the stability of society rests upon the intelligence of its constituents. But these daring, revolutionary doctrines are beginning to stir in impulses under the soil. The time is coming when men are not going to be satisfied with the pedantries of the narrow humanism, any more than they are satisfied with the narrow theologies of the Middle Ages. Men are breaking away from the traditions of the schools; the very conception of school is distasteful to many. The stupid routine of the schoool tends to make the boy a "greater and more conceited coxcomb"; it does not fit him for his world. Hence there are those who insist that education will best do its work when it puts a minimum of emphasis upon mere bookishness, but rather sends the boy out into the world of men and affairs, into the experience of travel among all sorts and conditions, bringing familiarity with a wide range of manners and customs, strange peoples, and varied conditions of living, thus tearing the boy loose from his isolation in his own parish and his own age and helping him to get the experiences and marks of the traveled man of the world. It is even written in this age:

[1] Locke: "Thoughts on Education."

How much the fool that has been sent to roam
Excels the fool that always stays at home!

Books cannot perform this service, for the book is really the great means of dulling the wits, of formalizing the mind, of reducing the whole of conduct to a conventional routine. Books are products of the world of experience; if they are worth anything, they are writ out of broad experience and they cannot be read profitably without something of that same world of experience in the reader. Schools fail to educate for the reason that teachers are pedants, not real men, and they are sticklers for useless and meaningless details, afraid of the vital breath of life, afraid of the modern problems. No, education must prepare for the "best of all arts,—the art of living well"; and this is a matter of life, of living, rather than of the schools, or books, or learning. Let us turn, for a chief representative of this tendency, to Montaigne, a French aristocrat, traveler, and writer.

Montaigne (1533–1592).—Montaigne was too much a man of the world to confine his writings wholly to educational topics in the narrower sense. But he wrote two valuable essays on the subject. These are his "On Pedantry" and "On the Education of Children." In these essays he sets forth rather clearly his conception of education. He overwhelms the narrow humanism of his times with his ridicule. He holds that ideas are more important than mere words, that, indeed, "whoever has in his mind a clear and vivid idea will express it in one way or another." He holds that education is for the purpose of forming character, which alone can come from experience and breadth of vision. Hence he would send young men abroad early, under the care of proper tutors, in order that they may "whet and sharpen" their wits "by rubbing them on those of others." Such training should be-

gin when the boy is very young. The book he studies should be the book of society. "I would have this the book my young gentleman should study with most attention; for so many humors, so many sects, so many judgments, opinions, laws, and customs teach us to judge aright of our own, and inform our understanding to discover its imperfect and natural infirmity."

Montaigne would have all these experiences broadened and deepened by the study of what he calls philosophy, along with some of the older subjects of the schools; but he especially insists that men must come to have some sort of philosophy. "Philosophy is that which instructs us to live . . . "—by which we may see that he was not of the academic succession. The whole man calls for his earnest care. "It is not a soul, it is not a body that we are training; it is a man, and we ought not to divide him into two parts."

Method in Social Realism.—We have said above that the problem of method did not appear in this seventeenth century sifting of materials. By that statement was meant that the real foundations of method were not seriously sought. Methods of teaching were discussed, but these all practically involve the application of old, traditional principles in some novel way. Montaigne expresses himself freely along these lines; for Montaigne does not suppose that the boy will never go to school. He rings the changes on old methods and makes them over so that these new social materials will be more fully assimilated to the real experience of the student. He says:

I would not only have the instructor demand an account of the words contained in a lesson, but of the sense and substance; and judge of the profit he had made of it, not by the testimony of his memory, but by his own judgment. It is a sign of crudity and indigestion for a man to throw up his meat as he swallowed

it. The stomach has not done its work unless it has changed the form and altered the condition of the food given to it. We see men gape after nothing but learning, and when they say such a one is a learned man, they think they have said enough.

A mere bookish knowledge is useless. It may embellish actions, but it is not a foundation for them. Among the liberal studies let us begin with those which make us free; not that they do not all serve in some measure to the instruction and use of life, as do all other things, but let us make choice of those which directly and professedly serve to that end. If we were once able to restrain the offices of human life within their just and natural limits, we should find that most of the subjects now taught are of no great use to us; and even in those that are useful there are many points it would be better to leave alone, and, following Socrates' direction, limit our studies to those of real utility. The youth we would train has little time to spare; he owes but the first fifteen or sixteen years of his life to his tutor; the remainder is due to action. Many a time I have seen men totally useless on account of an immoderate thirst for knowledge. There is nothing like alluring the appetite and affection, otherwise you make nothing but so many asses laden with books. By virtue of the lash you give them a pocketful of learning to keep, whereas you should not only lodge it with them, but marry it to them, and make it a part of their very minds and souls. . . . We labor and plot to stuff the memory, and in the meantime leave the conscience and the understanding empty. . . . But it is not enough that our education does not spoil us, it must change us for the better. Some of our parliaments and courts admit officers after testing them as to their learning; others, in addition, require their judgment in some case of law. The second method is the better, I think. Both are necessary, and it is very essential that men should be defective in neither; yet knowledge is not so absolutely necessary as judgment.[1]

By the very nature of the case this social material escapes somewhat from the imputation of materialism; and,

[1] Montaigne: "The Education of Children."

as in the above quotation, Montaigne frequently rises above the materialistic level. But still for the most part he is not able to escape the feeling that education consists primarily in taking on certain materials. That is to say, while this doctrine of a socialized experience is one of the permanent contributions to educational theory and practice, it was not stated in its final form by Montaigne. Indeed, as we shall see, we are just now, in the twentieth century, in the very midst of the problem of analyzing, understanding, organizing, and stating the significance of social experience in education.

We turn next to a third type of material.

(c) SENSE MATERIALISM, OR NATURAL REALISM

If "the proper study of mankind is man," still men begin their study of man as far away from home as possible. Of course all study of the world is really the study of man; but philosophy went on for several hundred years before Socrates finally brought it "down from heaven" and immediately turned it to the study of humanity. So in the same way all through these ages we have been drawing slowly closer and closer to the central problems of education. In these processes of sifting out the materials of the new world certain fundamental tendencies appear which have profound influence upon the succeeding developments. Perhaps we should note here, however, that none of these processes, or tendencies, is exhaustively presented; only the barest outlines, the "high points," can be suggested.

The New World of Nature.—Despite the opposition of the classicists and the traditionalists generally, the sixteenth and seventeenth centuries saw the gradual acceptance of the materials of physical nature as a legitimate part of the materials of education. These materials had been

unknown during the Middle Ages, being ignored as base, or shunned as defiling. To be sure, there had been the search for some means of turning base metals into pure gold, and this had helped much in the secret development of the beginnings of modern science. And there had been other tendencies all through the Middle Ages that went on under quiet conditions; not all the "science" of the times was "foolishness." After the coming of the Saracens real science forged ahead apace. Later the Renaissance released the minds of men from their old attitudes toward the world of nature and threw over all existence the mantle of romance and beauty. Human emotions found a new means of release in these new attitudes and stimulations, and the old prejudices were broken.

The new age forced amazing new resources in the way of knowledge upon the world. Bacon, as we have seen, felt the need of some more effective tool for the proper handling of these new materials and their integration with the old world of experience. Some little progress was made in the forging of that tool in the seventeenth century; but on the whole nature was still to be regarded as a crude mass of materials, to be picked over and culled over, like scraps upon a bargain counter, for whatever of incidental interest might appear.

To be sure, certain constructive theories began to make their appearance. The created universe, limited in extent and centering in the earth, was turned inside out by the organizing work of Copernicus with his revolutionary theory; the telescope and the microscope were soon to make old theories of nature and life utterly untenable; the threads of the ancient doctrine of evolution, lost for two thousand years, were rediscovered, and the discovery of new tribes of men made old theories of the origin of humanity untenable. The sixteenth and seventeenth cen-

turies were amazingly fruitful in the accumulation of facts, the atoms of knowledge; but for the most part these facts lacked organization and coherence, and hence they found slight welcome in the traditional schools. Classical materialism had no real place for them. "Life must be learned from the books"; even knowledge of the world of nature must still be sought in the writings of Aristotle, the "Master of those who know." In the same way the social realists found little value in piling up stores of general information about the world of nature. Montaigne insists that we should follow Socrates' direction and "limit our studies to those of real utility."

Hence, if these new materials of nature are to be included in the accepted materials of education, some positive argument must be made for them. That much of the problem of method was rather clearly seen by the sense realists, such, for example, as Comenius. But just what that would involve of psychological reconstruction no one, of course, could foresee. If these new materials are to be utilized, an utterly new educational point of view will be needed, which will give these new materials foundations upon which to build and arguments with which to meet the jeers of the older materials. This much is clear.

The Educational Conception.—Here was not merely a new subject matter; here was a *new kind* of subject matter. Hitherto, since the days of Socrates, the prevailing method of teaching had been memorizing. To be sure, the social realists had gone beyond or outside this endless task of memorizing; they had conceived of education as something immediately experienced in the midst of travel and affairs. They had depended upon a sort of intuition, or social perception, as the basis of their accomplishments. But they had no great following in the schools; memoriz-

ing was still the essential pedagogical tool of all learning.

Now the appreciation of this new material of nature brings in a new aspect of the mind. Francis Bacon had insisted upon observation as the basis of his inductive method; and the use of the senses in this way as the main avenue of all education was gradually coming to recognition. But we must make careful note here that there had been almost no study of psychology since the days of Aristotle, at least, of any psychology that would have any real significance for educational practice. We must note, too, that the development of this new type of material was important not primarily because it brought in a new aspect of the world of experience, but because it once more forced home to educational leaders and reformers the problem of method. The classical materials were memorized; the average student of the classics did not know what he was studying. He memorized vocabularies, grammatical rules, and, to a degree, selected passages from the literatures; but he did not *know* what he was doing. The reason is plain. He was dealing with the finished materials of a sophisticated world, the concepts of life worked out in the microcosm of Athens or Rome. He could not know their meanings; he could only memorize and retain the literal materials until experience could illuminate or a kindly forgetfulness erase. Not so now with these new materials of the world of physical nature. These are not, at first, *conceptual* materials at all; these are *perceptual* materials primarily, and conceptual only in a secondary sense, i.e., after they have been worked over into the sciences. The pupil must come to them first hand, getting the actual experience of the object before learning some bookish definition, i.e., some reconstructed conceptual statement of the object; and he must get the language part of his knowledge of the object in the process, and for the purpose

of giving expression to the common, concrete experience part. This sets the materials of sensation off from all other materials.

Thus it will be seen that the very movement toward the sifting of these various knowledges, their separation from one another, and their organization into curricula for the schools or for other forms of educational effort, led inevitably to the opening anew of the problem of method. In one sense it may be said that in the consideration of these materials, there will be raised for the first time the question of the relation of *materials* to *mental processes.* That is to say, for the first time the problem of an educational psychology has a real chance to appear; for the first time the part that mind plays in the educational process will break through the general materialism of educational thinking; and thus materialism will develop its own inconsistencies, its own problems, and demonstrate its own insufficiency. All this, of course, does not appear at this time. Even to Comenius the problem is only superficially present, though the influence upon him of Bacon tends to make him feel the problem more keenly than any other will feel it for a century. No, it takes time to develop the implications of progress. But little by little, as we follow the course of educational thinking through the next century, we shall see this question of method gradually formulate itself. What is the place of *mind,* of mental activity, in the educational process? What attention must the teacher pay to the *mind* of the child, as over against the attention so long paid to the *materials* of the lessons? That question, so commonplace now and yet even to-day so little understood, slowly struggled into the consciousness of this realistic age through the work of men who were not properly to be called realists at all. But when the age had become aware of the problem, another age had dawned,

an age of larger minds and more encompassing comprehensions. The problem of materials had passed into secondary place for the real leaders of educational progress; the problem of materials could never again be the central problem in education for any save those whose comprehension of the movements of human thought had stopped with the achievements of the seventeenth century. To be sure, even yet, as we shall see, the belated upholders of old partisan programs are to be seen and heard in the land. It may be said without exaggeration that even to-day many educators are utterly innocent of any comprehension that there has been any fundamental progress since the middle of the seventeenth century. Like "Uncle Jasper" reiterating in his pious, illiterate way, "The sun do move," these belated representatives of honorable traditions still may be heard to cry, "The only genuine materials of education are the old theories I believe in!"

Meanwhile the world has moved on from the discussion of materials to the examination of the more insistent and far more important problems of the various methods that underlie these various materials, even to the larger and more inclusive problem of method in its largest sense: What is the actual nature of human experience, and what are the fundamental processes by which the immature experience of the child becomes the world-experience of the cultivated and disciplined adult,—the man "with power on his own self and on the world"? This problem of the nature of experience arises out of these conflicts of materials. The mind of man is not the pawn of some fancier of materials, however noble his materials may be. There is a larger future for the race than that of bowing forever at the shrine of old materials. The spirit of man is creative, and passes on from age to age to the construction of new worlds of freedom.

The Sense Materialists.—Wolfgang Ratke (1571–1635) was one of the first leaders in this educational movement. His interest was not wholly directed toward these materials of the senses, however. Rather he illustrates the point just made, that the mind needs not only new *materials* for its larger structures, but also new *methods.* Ratke is, therefore, a follower of Bacon on the side of method, rather than on the side of materials. He was very much interested in the subject of language; and he conceived of language as a tool of the mind, which might, under wrong conditions, become the master of the mind, just as Bacon had set forth in his illustration of the idols of the theater or of the forum, in which he points out how old words and old systems of thought bind men's minds to the past. Accordingly, Ratke would have all instruction carried on in the vernacular, partly for the sake of social and national uniformity, but also partly for the sake of making sure that all the children of the nation should have a real contact with the arts and the sciences. It is very important to note here that these new movements in the sciences come in along with the large developments of the modern languages, as if, in establishing the new understanding of the world, the mind must have a new instrument of statement and organization. The escape from Latin into the modern vernaculars is one of the notable achievements of the human mind, for it meant escape from these "idols" of Bacon (at least, in large part) into the freedom of the modern scientific attitude.

Ratke found the roots of method in nature; psychology had not yet developed the true foundations of the teaching processes. But the search for *method* is one of the true reasons for the ultimate development of psychology; psychology is the answer to the demand of the growing experience of the world for a clearer understanding of its

own nature. So, for example, when Ratke presumably writes: "Since nature uses a particular method proper to herself with which the understanding of man is in a certain connection, regard must be had to it also in the art of teaching, for all unnatural and violent or forcible teaching and learning is harmful and weakens nature," we need to see that nature here does not mean some aspect of the world completely divorced from man. It includes man; and when men begin to find method in nature, it will not be long before they also begin to find it in human experience; and that will give us psychology.

Comenius (1592–1670) is, however, the greatest of these advocates of the new materials of nature as the basis of education. A sad fate, however, a fate such as that which befell Aristotle, kept Comenius from having any large influence upon his own or the immediately succeeding generations, except in reference to the teaching of the languages, with which we are not concerned here. The writings of Comenius were almost completely unknown until the middle of the nineteenth century, when they were brought to light. His influence was almost wholly personal, therefore, and extended but little beyond the circle of his own contacts. He was called to England, as we have seen in a previous chapter, but for a purpose somewhat remote from our present interest. His conception of education, as we can now see from his writings, was very large and inclusive; but while largely scientific, it was not wholly divorced from his older theological training. If his writings had become part of the current educational discussion, doubtless the general course of educational history would have been different. But they did not. They came into the stream of educational thought in the middle of the nineteenth century. Hence any full account of his work would really belong to that

period, rather than to the period in which he lived. But by the middle of the nineteenth century the general conception of a method according to nature was coming in from other sources. Comenius did but strengthen that which was being done by other forces.

To be sure, Comenius had been a prolific writer of textbooks for the schools; and these texts were largely used, in Germany especially. But they were, for the most part, texts dealing with the teaching of the languages, not with the materials of nature. There is a real stream of influence reaching from the interest in nature which Comenius had developed to the *Real-schulen* of Germany in the eighteenth century. The first of these, founded at Berlin in 1747 by Hecker, included drawing, history, geography, geometry, arithmetic, mechanics, and architecture in its curriculum, as well as the Latin language, writing, religion, and ethics. Toward the end of the eighteenth century these schools became centers of naturalism in education, under the general influence of the work of Rousseau.

CHAPTER XXVIII

EDUCATION AS A PROCESS OF MENTAL DISCIPLINE

We have seen that the programs of the realists, emphasizing, as they did, various types of subject matter, were not permanently satisfactory. This was for the reason,—as we can now see,—that they leave out of account the most important aspect of the whole program—mind, the mind of the learner. None the less, these suggested solutions raise this central problem of education into at least partial view; they make the world face seriously the possibilities that lie in materials of various sorts; and they show conclusively in their outcome that the problem of education can never be solved by any sort of materials alone. That is to say, the sifting of materials shows both the importance of various kinds of materials and the failure of any one kind to solve the problem.

But this sifting of experience shows another important fact, viz., that these materials themselves have various mental values and significances. This raises more important questions. What is the real nature of materials? What is the real nature of the mental processes that are involved in education and that seem to be able to handle these various types of materials? And what is the real nature of education itself. Is it, after all, the taking on of some sort of material? Is it memorizing set lessons? Is it assimilating experiences? Is it observing natural phenomena? Is it absorption of fine ideals? Is it doing of disagreeable tasks? Is it an effort to save the soul? And finally there must emerge, soon or late, this more pressing

problem: Is it possible to analyze and relate and understand the various types of mental processes involved in dealing with these various types of materials in such a way as to make use of these processes in the actual practice of teaching? Of course we are to understand that these questions and problems emerge slowly from the great bulk of the unanalyzed problem. But we are to understand that such problems as these were actually involved in the developments through which we are passing. One thing is sure: the race has won its intellectual triumphs so far only by means of the most strenuous efforts. These struggles of the centuries are not academic, forced, or incidental sports; they are the most vital struggles of the race. By these struggles the race has won its way out of some of the ignorance of the folkway world, out of the inertia of old habits and traditions, out of the systems built in earlier and less intelligent times, into something, at least, of knowledge, of intelligence, of farther-sighted control of the conditions of living. None of these systems is final; they are all parts of the lasting conversation by which the world has been arguing its way out into the hitherto unexplored regions of human nature and making itself acquainted with life and the world. That task is not yet finished; the conversation is still far from being concluded; and certainly the seventeenth century must not be accepted as giving the final touches to human progress.

The Reaction from Materialism.—None the less, the seventeenth century offered certain striking arguments and certain fundamental problems to the conversation. Materialism in education did not satisfy. In the reaction that followed its full exploitation the argument swung far to the other side, and we find ourselves once more dealing with one other aspect of the problem of method. If, the question may be supposed to run, no particular sort of

material nor all sorts put together are finally satisfactory, wherein lies their unsatisfactoriness? That is to say, how is the decision against these highly recommended materials reached? Who is the judge; and what rights has this judge in the case? The answer is that the mind is the judge. But this changes the whole nature of the problem. If the mind is to determine what shall satisfy and what shall not, what is to become of all these old materials of education? What is to become of old systems and institutions? The answer is sweeping enough. These must all go, for we are in the midst of the Enlightenment, the *Aufklarung,* the clearing up of all old, dark places and the opening of all the world to the white light of truth! In such a time as this the stage must be swept clean. The mind is henceforth to make its own world and to build its foundation upon evident realities. Descartes (1596–1650) began it by calling all old experience into question and attempting to get a secure basis in his own criticised experiences. By doubting he laid waste all the past, even his own; then by thought he began to build his new world. One thing he could not doubt—that he was able to doubt. On this he builds. *"Cogito, ergo sum!"* Nothing was to be taken into his new world merely because it had been in the old world; it was stand the test of critical doubt. So the mind comes into its own!

But in England the process went even further. John Locke began that long movement of critical analysis which, carried on through Berkeley and Hume, first called all external existence into question and reduced the whole world to idea, the construct of the mind; and which finally called the mind itself into question and reduced it to a mere chain of associations. All the sacred symbolisms, ideas, and institutions of the past were dissolved in this crucible of critical analysis. Theoretically, nothing was left of the

substance of the world. Theoretically, this was a complete house-cleaning, in which the old materials were swept out, leaving the house clean and bare.

Education as Discipline of the Mind.—But practically, of course, men went on living. It was certainly a time of social, political, and industrial reconstruction; systems were crashing on every hand. Still men must go on living, and young people must go on growing up and getting ready to live. What sort of education shall be effective in a period such as this? How can the evils of a transition period be overcome? What shall take the place of the substantial materials of the old world-systems? What, indeed, but that one thing which even Hume could not wholly dissolve—the mind itself! Let the mind become the center of educational activity!

In this way does Locke overcome the skepticism of his own philosophy and reach a more secure basis for the development of a very powerful and influential educational theory. The mental life of the individual becomes the all-important consideration. This inner life must be disciplined, habituated, trained, until it has fitted itself to the conditions of existence. Tastes, capacities, endowment, are all to be consulted in this disciplinary procedure, and the whole process is to be sufficiently enjoyable to make it acceptable to the pupil. None the less, Locke sternly declares:

> As the strength of the Body lies chiefly in being able to endure Hardships, so also does that of the Mind, and the great Principle and Foundation of all Virtue and Worth is placed in this: that a Man is able to deny himself his own desires, cross his own inclinations, and purely follow what Reason directs as best, though the appetite lean the other way. . . . If, therefore, I might be heard, I would advise that, contrary to the ordinary way, children should be used to submit their desires and go without their Longings, even from their very Cradles.

The best education is that which trains and disciplines and fortifies the mind. To be sure, certain materials will have to be used; but these will not be selected for their own sake, nor for their informational or ideal character. They will be selected wholly for their *formal* or formative values, for their worth and use in forming the mind, in disciplining the desires, and in bringing all the elements of the nature under the control of reason. If mathematics and grammar are chosen for these purposes, that choice does not rest on the same grounds as would dictate the choice of the same material by a classical realist. He would choose grammar, for example, because grammar is the gateway into the world of literature. Locke would choose it, however, because its nature makes it a peculiarly fine instrument for forming the mind.

The Basis of Discipline.—At its best this doctrine of mental discipline is the noblest theory of education ever stated. At its worst, it is the most outrageous instrument for the deformation of the child's possibilities. Whether it shall be the one or the other depends upon the psychological theory that surrounds the disciplinary process. A disciplined mind is the sort of mind needed in facing the urgencies and emergencies of the world of action. But there is present in the world a fundamental fallacy of this sort: "Here is a man who through his interest in a certain task, through his loyalty to a central aim, through his enthusiasm for a future good, has secured the finest sort of mental discipline; therefore let us now put before all children these same certain tasks, central aims, and future goods, and we shall thus secure the same splendid mental discipline for all individuals." The fallacy is one which will not be grasped without some special appreciation of the psychology of the case. It is of the same sort as that made by the later humanists when they tried to make the

classics serve as a universal curriculum and so brought about the development of Ciceronianism. Such fallacies are, of course, evidences of a prepsychological age; if they exist to-day, they are survivals from such an age.

The more genuine basis of discipline will appear in later stages of our discussion. Although the doctrines of Locke have been much disputed and in large measure discredited; although the educational movement which Locke fathered became the most influential factor in the development of educational practice in England and America and fixed upon both countries a conception which, in its baser form, became the excuse for all sorts of brutalities, including the famous dictum of the "Hoosier Schoolmaster" that "lickin' an' larnin' go together"; although at the present time the greatest educational task is that of escaping from the hard clutches of this conception of discipline without falling over into the equally undesirable doctrines of recent soft pedagogy—despite all these things, this disciplinary doctrine of Locke represents a real advance upon the past, a genuine stage in the development of the thinking-out of the educational problem. For through Locke's work educational discussion crosses over from the consideration of *materials* to the consideration of *mind;* the mind actually enters into educational discussion, and that is a great gain! To be sure, this mind is a curious sort of entity; but it is here. Despite all the efforts of the educational materialists, it will remain, first as one of the elements to be taken into account in the solution of the problem of education, and finally as the one central factor around which all other aspects of the case revolve.

For Locke himself the mind is at first simply a clean surface, a *tabula rasa,* on which nothing has been written, on which experience will slowly write the story of life. This writing will take place entirely through the senses.

"There is nothing in the mind which has not previously been in the senses." In this the mind is not primarily active, but passive. Learning is taking on impressions; mastery comes through large accumulation of impressions, as if bulk of information should be so impressive as to compel respect. There is little of feeling that the mind is to have any creative part in the making of the world. The whole of education is the formation of habit, especially habit of thought. Locke would have education be the "moral discipline of the intellect." "The business of education is not to make the young perfect in any of the sciences, but so to open and dispose their minds as may best make them capable of any, when they shall apply themselves to it." Yet there is a curious turning of the outlook here in Locke's thinking, as there is in all discussions of the disciplinary following. It is rather naïvely assumed that the mind can be put through these passive performances for a number of years, during which these *habits* will have been built up; and that at some time undetermined, by some method or magic unexplained, the mind will become free, capable, inventive, masterful, even creative. "Would you have a man reason well, you must use him (make him used) to it betimes, exercise his mind in observing the connection of ideas and following them in train." For the purposes of this habit-forming exercise of the mind nothing is better than mathematics, "which therefore I think should be taught all those who have the time and opportunity, not so much to make them *mathematicians* as to make them *reasonable creatures*. . . . I have mentioned mathematics as a way to settle in the mind a habit of reasoning closely and in train; not that I think it necessary that all men should go deep into mathematics, but that having got the way of reasoning which that study necessarily brings the mind

to, they might be able to transfer it to other parts of knowledge as they shall have occasion."

It will be seen from these quotations that though the mind rather definitely emerges from its age-long submergence in old materials, yet Locke intends that it shall have no easy time of it. "I do say that inuring children gently to suffer some degrees of pain without shrinking is a way to gain firmness to their minds and lay a foundation for courage and resolution in the future part of their lives." But it is a great gain to have given the mind even this hard chance. Eventually it will emerge into full expression. And this rather harsh attitude toward old knowledges and systems, which was expressed in the Enlightenment and in this doctrine of discipline in education, became the motive to revolt on the part of the leaders of the so-called "romantic" movement, out of which came a more human, a more natural conception of living and of education. This more natural ideal of life and education found its most vigorous expression in Rousseau. To him we turn for the statement of the next phase of this winding argument.

CHAPTER XXIX

EDUCATION AS NATURAL GROWTH FROM WITHIN: ROUSSEAU

We have already seen that there has been a fundamental conflict all through history as to the real nature of experience. Two parties have stood forth now and again. The one represents the world as complete, intellectual, factual, in which education consists of taking on certain of these completed intellectual systems; the other represents the world as incomplete, changing, non-intellectual at the beginning, and in which education consists of the gradual development from within of an experience that can be depended upon to direct and control the destiny of the individual in the midst of changing conditions. The former seems to have been illustrated by the work of Plato, and especially by the structure of the world in the Middle Ages; the latter seems to have been illustrated by the conceptions of Socrates and the ideals of primitive Christianity. We also come upon it again in the educational theory of Rousseau. That is to say, the general bearing of the doctrines of Rousseau is much the same as the bearing of the Socratic doctrine, or the simpler Christian teaching that life depends upon growth from within, rather than external institutionalizing.

The Doctrines of Rousseau.—Rousseau (1712–1778) was born into a world that was already beginning to seethe with the underground impulses of revolution. His life was one long struggle to understand and to be understood. He never experienced anything of the nature of what

Locke would have called mental discipline; and his life shows all the excesses that Locke would have predicted from such a deficient education. At the age of six his father read to him extensively from silly novels of the day. Later he himself read some valuable books which he came upon in a private library. But his childhood knew nothing of discipline; and even the reading of the Parallel Lives of Plutarch and other books of like sort only served to stimulate his deeper sense of the injustice of the world of his time and to set more and more aflame his spirit of revolt and his love of liberty. Hence as soon as Rousseau began to think for himself and to write, he became a revolutionist. Many years of wandering tended to intensify his feelings that civilization was heartless and hopelessly corrupt. His earliest writings deal with the origins of this heartlessness and corruption; and gradually he comes to the belief that the only hope for humanity is to be found in a complete revolution in its social organization and its education. Civilization has become utterly corrupt; an artificial education has been largely responsible for this. Civilization must become natural once more, and education must also be made natural. This theory is, of course, involved in all sorts of contradictions, but aside from these there still stands forth a fairly definite conception of what natural education should be. This educational doctrine is set forth in his "Emile."

There are four stages in the education of the boy "from the moment of his birth up to the time when, having become a mature man, he will no longer need any other guide than himself." These four stages are:

(1) Infancy, during which the child is to be taken away from society and given a training under natural conditions. His parents are to do this work in very simple fashion, or if his parents cannot do it, some tutor who can gain the

child's confidence must be found. This first period of five years is given over to a purely physical training.

(2) Childhood, covering the years from five to twelve, during which time he is to learn mostly by experiencing the consequences of what he does. This period is to be given over largely to physical education. The soul must be kept fallow; there should be no moral training, no precepts, and no preaching. There must be plenty of exercise, since the boy is getting ready for the life of reason, and "in order to think, we must exercise our limbs, our senses, and our organs, which are the instruments of our intelligence."

(3) Boyhood,—from twelve to fifteen. This is "the time of labor, instruction, and study," but limited to that which is merely useful. "Ask questions that are within his comprehension, but leave him to resolve them. Let him know nothing because you have told it to him, but because he has comprehended it himself; he is not to learn science, but to discover it. If you ever substitute in his mind authority for reason, he will no longer reason." In this period the boy may have one book—the only book, it seems, fitted to make the boy reason without at the same time dominating his mental development and thus destroying his mental powers. That book is "Robinson Crusoe," "where all the natural needs of man are exhibited in a manner obvious to the mind of a child, and where the means of providing for these needs are successively developed with the same facility."

(4) Youth,—from fifteen to maturity. This is the time of moral and religious development. "We have formed his body, his senses, and his intelligence; it remains to give him a heart."

In a fifth part of "Emile" Rousseau sets forth the education of the girl who is to become the wife of the educated man. One quotation will suffice to show his attitude here:

> The whole education of women ought to be relative to men. To please them, to be useful to them, to make themselves loved and honored by them, to educate them when young, to care for them when grown, to counsel them, to console them, to make life agreeable and sweet to them—these are the duties of women at all times and what should be taught them from infancy.

That is to say, the education of the boy is to be active, constructive, individual, and natural; the education of the girl is to make her passive, receptive, and submissive. It was an age of revolution, but feminism was not one of the elements in the creed of that revolution.

The Significance of Rousseau.—Of course no one but an absolutist would think of finding ultimate truth in Rousseau. His significance does not lie in any final solution of the problem of education or social organization, but in the new direction which he gave to the argument and in the new forces which his energetic presentations uncovered and released. He did not understand children, but he started the whole modern movement for the study of children. He cut the world free from its old dogmatisms about the materials of education; he brought to an end the dominance of the doctrine of mental discipline; he showed that there is something deeper in human life, and therefore in education, than knowledge or materials or systems or disciplines; he brought back the world to something of the earlier Renaissance feeling for nature and renewed, socially and educationally, the decadent faiths of the times in the worth of human life and the reality of the human soul. All the genuine streams of modern constructive educational thinking may trace their courses back to Rousseau; or, at least, one branch of their courses.

Nature in the Doctrines of Rousseau.—Rousseau's thinking is never wholly consistent. He uses words freely and without exact meanings, as is almost inevitable in deal-

ing with the mighty aspects of a great revolutionary epoch. His thinking is never conclusive; it is suggestive. He uses the word nature, or natural, to express his general meaning and purpose in education. Since we are on the eve of the great awakening of the nineteenth century, with its wonderful searching out of nature, it will be well to see the ways in which the term "nature" is used in the second half of the eighteenth century.

Rousseau uses the term "nature" in three distinct meanings. He would take the child out of the artificialities of the city to the realities of the country, where he will be close to nature; he would turn from the artificial organization of human life in the modern world to the natural organization which is found in more primitive societies; and he would turn from the artificialities of intellectualistic knowledge, as found in books or in conscious reason, to the natural, primitive, instinctive, unreasoned impulses and emotions. Thus we may see that to Rousseau nature means, first, the external world of undisturbed conditions—such a meaning as we have to-day in our term "nature-study"; it means, second, a certain primitive social order, such as we intend to convey by the term "natural tribes," as opposed to the term "cultured nations"; and it means, third, a certain primitive feeling for life in the individual, as opposed to the more developed and sophisticated life of reason—such a meaning as we intend to convey when we speak of a certain individual as being "natural."

That is to say, the term "nature" was used by Rousseau in such ways as to include, first, the worlds of interest now studied by botanists, zoölogists, etc.; second, the worlds of interest now studied by sociologists, anthropologists, etc.; and third, the worlds of interests now studied by psychologists, etc. Now while this is, in a measure, due to the confusion of Rousseau's thinking, it is also due in large

part to the modern recognition of the intimate relationships that exist between the intellectual and moral life of humanity and the whole range of universal nature. It is a premonition of the coming of a new doctrine of the origin of humanity. Under older doctrines of the creation of man, nature might be related to humanity in some remote degree, or in such a degree as man himself chose to recognize that relationship. But even in Rousseau's time the world is pressing swiftly forward toward the new belief that man himself is not a stranger in the earth, not one created and put into the world. The evolutionary doctrine is not far off; and even now men dimly and confusedly feel that man is of the nature of the world, a product of the universal life-order, wrought out of the very substance of nature and intimately related to that nature in all its varied aspects.

But at any rate, out from the influence of Rousseau flow three main streams of human interest, streams not wholly unlike those which flowed forth from the Renaissance—the natural sciences, whose field is nature in the first sense set forth above; the social sciences, whose field is nature in the second sense; and the psychological sciences, whose field is nature in the third sense set forth above.

Education will take each and all of these directions. That is to say, just as in the post-Renaissance period, as we have seen, the various new aspects of the world each found its adherents and supporters, and therefore developed its particular educational program, so, following upon the great revolutionary period of which Rousseau was, more than any other one man, the forerunner, the three aspects of nature which Rousseau confusedly emphasized became clearly distinguished and each became the central theme of educational development. The psychological aspect of nature was selected for development by a powerful group of thinkers; the natural science aspect was devel-

oped by another equally or more powerful group; and the third, or social science aspect, was developed after a long interval, but never perhaps by such powerful leaders.

Soon, therefore, the problem of competing programs again arises, just as in the old days of the realisms. Which is the more important, the more vital, the more valuable, science or the humanities, chemistry or sociology? We find ourselves, as we shall see, back on the levels of the old materialistic conflicts. There is almost no inquiry as to which of these three aspects of nature suggested by Rousseau is primary; each makes its own insistence. We see developing a definite movement toward a psychological interpretation of all educational problems and a no less definite movement, though somewhat later in time, toward making the materials of natural science the primary element in education. Soon the social sciences will be clamoring for admission, and back of all these we see the old classicists quietly waiting in materialistic gloom for the next rising of their old-time sun. The world is breaking up into fragments; parties are appearing. Is there no unifying outlook in all the world?

We turn first to the developments in the psychological direction. But before taking up that task in its specific aspects we shall do well to sum up the argument and the achievements to date. We must remember our main thesis: that the race is educated by its experiences; and also our secondary thesis: that history is mainly an exploration of the hidden depths of human nature. If we now look back over the experiences of the race since the dawn of the modern period, what new light has been thrown upon human nature by these intervening experiences?

We shall find that numerous important aspects of the mental life of man have come to light. Each of these aspects may be looked upon as a fragment of the whole nature of man. Later we shall see how the psychological movement

in education was just an effort to see the whole of human nature, or, perhaps, to see all these parts in relation to, and from the standpoint of, the whole of which they seemed to be parts. What, then, were these parts of human nature which had been slowly uncovered in these various movements? The answer must be suggestive, rather than conclusive or complete. But we may say that all the tendencies and movements in education—as well as in many other lines of development—in the modern period turned out to be really concerned with finding an approach to the mind. Thus, in the Renaissance we find a resurgence of the feelings which had been lost under the accumulations of centuries of barren institutionalism. Even in classic grammar there is an emphasis upon memory and will and the conceptual powers. In social realism there is an emphasis upon certain social perceptions, or intuitions. In sense realism there is an emphasis upon the sensory and perceptual powers. In the disciplinary conception of education there is found an assumption of a hypothetical mind, with faculties all existent, waiting only the discipline of sustained and vigorous use. In the growing inductive sciences there is an emphasis upon judgment, even though that emphasis was largely implicit. In the naturalism of Rousseau there was an emphasis upon the evolutionary doctrine of action and growth, in which the mind was assumed as a normal product of these normal processes of development.

Thus we may see that the mind has actually appeared. But it has appeared either as a complete, though dull thing, as in the doctrines of Locke; or as a germinal term in a process of natural growth, as in the suggestions of Rousseau. In neither case does the need of a general psychology appear.

However, all these developments point in one large direction. Even though fragmentary or fallacious, these devel-

opments are parts of one general trend of growth; they are parts of the ultimate truth. What, then, is the whole truth? What is the actual nature of mind? What is the relation of these various parts of mental activity to the whole of mental life? This becomes one of the great educational questions of the nineteenth century. Closely related to this question, indeed, as a fundamental aspect of this question, come others. What is the relationship of (educational) material to the mind? How shall a school be organized so that the mind shall find its true significance, its proper relationship to the world, and its proper developments within itself?

All these questions, and many others within the realm of educational discussion proper and outside it, press in upon the consciousness of the eighteenth century after its barren years are over and its fruitful decades have come. Kant, one of the world's most constructive thinkers, gives his life to these problems. In his handling of these questions the educational problem definitely and convincingly becomes a psychological problem, a problem whose ultimate or tentative solutions lie deep in the determinations of psychology. We turn now to the developments of this fully conscious psychological analysis.

CHAPTER XXX

THE EDUCATIONAL PROBLEM BECOMES PSYCHOLOGICAL

If we should now run back briefly over our argument, we should find that when we plunged out of the rather fixed and limited materials and methods of social living and education that marked the Middle Ages into the more and more complicated conditions and materials of the modern period, we were not merely facing new materials; we were facing new kinds of materials which would, sooner or later, make us face as sincerely and squarely as might be the whole problem of *method.* We did not realize that we were to be driven from trench to trench in our efforts to hold fast old educational traditions and methods; we even felt that the methods, the forms, of civilization were secure, and that all that remained to be done was the gradual organization of all new materials into these old forms. To be sure, we saw the Renaissance seemingly making things over; but we contented ourselves with the thought that it was merely bringing back to earth something that had been lost along our way. We saw the Reformation hewing away at the structure of medievalism, and for a while we trembled lest the whole should fall; but we were reassured presently when we saw Luther calmly retract and recant his radicalism, and return to the secure institutionalism of his new church. We heard for a while the voice of Bacon like "one crying in a wilderness" for the recognition of a new method with which to meet the new problems of the new period. But Bacon was ever an undependable man, and he was soon forgotten. When the realists appeared,—Comenius, Mil-

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ton, and Montaigne,—with their emphasis on materials, we knew that the world had returned to its sanity and that the old structure of civilization was safe.

But Descartes alarmed us with his doubt of all existence but his own power to doubt, Locke aroused us with his dissolution of almost all the solid earth, and Berkeley dismayed us with his complete destruction of the world we know,—until we remembered that he was a bishop, and then we knew that it was merely one of his little jokes. But when Rousseau undertook to destroy for us the very social order in which we live, and would insist that the only decent education is one that is secured outside civilized society, we found ourselves reduced to the terrible necessity of facing a doubt that has been with us through all this modern period, a doubt that even sometimes faced us in the ancient and medieval periods—after all, is this bald intellectualism, this materialism, this institutionalism the final statement of human life? If so, despite our boast of being modern, how do we really differ from the medievals? At any rate, Rousseau has raised the issue. Politically, the deluge is upon us; socially, we have come to the breakdown of conventionalities; educationally, we are utterly lost. Realism, disciplinism, naturalism, and all the other *isms* are all about us. Which way is *life?* Now, if ever in the history of the race, a masterful mind is needed to break through these conflicting isms, and to bring a new world-order, a new constructive expression of the fundamental basis of living. Perhaps more than one mind will be needed; but some one must begin the task. And such a man appeared in the great German philosopher, Kant.

Kant (1724–1804).—It is too long a story to tell how Kant undertook to organize the whole movement of human thought anew and to defend the reality of human culture against all its adversaries. But some little part of it must

here be set forth, if the rest of the story is to have real significance. Several lines of influence converged in the making of Kant's point of view. His training was in line with the old orthodox tradition in philosophy—the rationalism of the school of Leibnitz. Kant had learned from his teaching in this school that by the use of certain abstract principles of reason we can reach ultimate truth. Later he had come under the influence of the English philosophy, especially the teaching of Hume, and from that he had learned to doubt the power of reason to do the things claimed for it by the rationalists. Still later he had come under the influence of Rousseau's naturalism and the humanizing tendencies of the "romantic movement," as represented by Lessing and Herder. He had also been a special student of the rising sciences. Thus we can see that his experience had brought him into contact with all the leading streams of thought of his time. In him they all converged and met and fought out the preliminary conflict that was inevitable. The advances of humanity along intellectual lines have only been won by the most real and most strenuous conflicts; and here now, in Kant, all the diverse influences of the modern period which we have been deviously following came to an issue. But more than these main lines seem involved here. The main lines of philosophical development converge in him; to some extent the lines of social progress, as shown in criticism and revolution, are echoed in his thinking; the influence of the various enlightenments are also apparent, and the long lines of educational development which, as we have seen, seem to have reached immovable obstacles. All these, in greater or less degree, meet for the first time in Kant and fight out their battle.

The answer is still in doubt. That answer covers many aspects of human life—intellectual, moral, esthetic, social, political, educational, and religious. We shall not go into

these. Only one phase of the problem shall claim our attention here. Kant, himself, expressed the whole significance of his contribution to philosophy in a brief phrase which may serve to show us our own pathway through this maze. Kant calls attention to the fact that in the Middle Ages astronomy had conceived the universe as centering in the earth; the sun, the moon, the planets, and the fixed stars had all revolved about the earth as a center. Then came Copernicus with his revolution. The sun becomes the center of a solar system, and the earth revolves about the sun, as do also all the other planets of our system. Now Kant uses this "Copernican revolution in astronomy" to illustrate what he calls his own "Copernican revolution in thought." We may paraphrase his statements as follows:

Kant's "Copernican Revolution in Philosophy."—"In all discussions of the nature of the world and of human experience, hitherto, it has always been assumed that the world was created and finished in a final form, and that all objects of knowledge exist in this final form; and that, therefore, all our knowledge comes of discovering just how these finished objects appear. All our knowledge conforms to, or copies, these finished objects. That is to say, the objects of the world exist in final forms, and the mind in coming to know these objects is molded by them, conforms to them, comes to be like them, in some sense.

"But every attempt from this point of view to explain how we can extend our knowledge beyond the range of immediate experience, i.e., how we can get beyond objects, has ended in failure. Therefore the time has now come to ask a critical question: 'Should we not be nearer the truth if we were to suppose that the world and the objects of knowledge are not really finished, but that in the process by means of which the mind becomes acquainted with any object, the object changes so as to fit into the mind's capacities for

knowing?' That is to say, our point of view is this: The mind is a system of knowing; every object that comes into knowledge, or into the mind, must fit into the mind's system; hence every such object must change in the process of becoming known, and *must conform to the mind's power to know,* or else remain unknown.

"Our suggestion is similar to that of Copernicus in astronomy, who, finding it impossible to explain the movements of the heavenly bodies on the supposition that they turned round the spectator, tried whether he might not succeed better by supposing the spectator to revolve, and the stars to remain at rest. Let us make a similar experiment in our study of the way in which we come to know objects. If our minds, our capacities for knowledge, our perceptions, were really determined by the objects that we come to know, we could never know anything beyond the range of our immediate perceptions; but if, on the other hand, the objects of sensation and perception change, are modified in the process of learning, if they do conform to the character of our minds, then the whole problem is easy."

Well, it was not so easy as Kant supposed; but he had found a real clue to the future developments in philosophy, psychology, and education,—and, indeed, in all other human lines. From this time forward mind shall be no longer the plaything of materials; it shall be no more a mere *tabula rasa,* to be filled by the rigid will of some disciplinarian; it shall not even be mere wild and natural primitive impulses, which may develop their own anarchic characteristics unhindered by the experiences of the past. No doubt there will be those—doubtless there are some, even still—who are innocent of any acquaintance with this fundamental revolution in philosophy, psychology, and education, those who still consider mind from the old seventeenth century standpoint.

But all philosophy, psychology, and educational theory that knows the history of its own development realizes that *mind* is the central factor in the problems of to-day. Let us see this more clearly in the one field of education.

The Convergence of Educational Movement in Kant's Revolution.—In the two centuries preceding Kant there had been, as we know, three general solutions of the educational problem. These were, of course, in addition to the actual traditional practices of the ordinary schools and the folk-way education that still went on in the common living. These three general solutions were as follows:

(a) The various realists had solved the problem by means of various types of materials, each of which was supposed to be the most valuable of all the possible sorts of materials known.

(b) The formalists, or disciplinarians, had set up a sort of hypothetical mind, which was to be disciplined into shape and use by certain selected materials and by certain hardening experiences.

(c) The naturalists had solved the problem by setting forth how individual personality could be developed, if the child were freed from the artificialities of civilization and given a real chance to grow up in freedom.

Now each of these three solutions presents something of genuine value, and the third presents something that is essentially new in this age, though not utterly new in the world's experience. But each of these three solutions is afflicted with a fatal ignorance, and all of them almost in the same degree—they are all ignorant of the activities of the mind which is the real subject of these solutions. None of them knows much, if anything, of the mental processes that are involved in mental development, or in the growth and enrichment of experience. There is, of course, a movement toward this central problem, so much so, indeed, that

whereas, Locke, for example, still sees the child as an object to be educated, Rousseau makes the child in some measure, the subject of his own education, not completely acted upon, but acting. Yet even Rousseau scarcely gets beyond this bulk statement of the case.

But Kant, in his turn, raises the whole problem out of the realm of mere materials and external disciplines and undisturbed developments of natural capacities. He does not, indeed, set forth a solution of the educational problem in terms that are clear and final. But his "Copernican revolution" can be applied to the solution of this problem; it will be applied by later educational theorists; and when so applied, the "solution" will be somewhat as follows:

"The mind is central in any process of learning; objects, things, the world of experience itself, *comes into being* in the process of becoming known. Learning does not consist of conforming the mind to an object that is already in existence; it consists of creating and constructing an object, objects, things, a world. Hence the real educational problem, when it is raised to this level of conscious understanding, becomes: How does experience actually proceed in the construction of its own world?"

If it may be objected that Kant never set forth the problem of education in this way, the answer is that this is the implication of his own "Copernican revolution," and that sooner or later such a statement of the problem will be made; and, further, that without such a statement the significance of modern movements in educational thinking must remain forever hidden.

This statement of the problem, when it has been fully apprehended by the teacher, makes all further consideration of the problem proceed from the inside. "What is actually going on in the mind of the pupil, and what actual changes are taking place in his experience?" Of course the answers

to these and all similar problems are to be found not in idealistic speculations, but in the long and patient inquiries into the fields of psychology, inquiries which have marked the succeeding century. The tragedy of educational history of the nineteenth century is this: In the universal reconstruction that the revolutions forced upon the world at the beginning of the century the educational problem became recognized as one of the most fundamental social problems; and in the intellectual reconstruction that was actually begun by Kant the educational problem became recognized as, in large measure, a problem in psychological analysis. Yet in the face of these two tremendous facts few social, political, or even psychological leaders have been interested in the deeper problems of education, and most teachers have been utterly innocent of any understanding of the developments in psychology or the tremendous importance of psychology in the understanding of the problem.

The world has been passing through a series of profound revolutions since the days when Rousseau wrote his "Emile." These revolutions have affected our whole political structure, and our whole industrial organization is in the process of reconstruction. Religious life has not felt the effects of this revolutionary influence in any marked degree, save in the direction of certain disintegrating tendencies; for the religious revolution failed to realize its early aims, and the religious world settled back into a sort of futile contentment. The actual organization of democratic nations has come about; but the logic of democracy has not yet found its place in the control of education. The revolution has not yet penetrated to our educational procedure. The implications of the social and intellectual revolutions of the late eighteenth and early nineteenth centuries have been wearing upon our educational traditions for a generation; but those traditions die hard. We shall see hereafter how

the traditions of the prepsychological ages find much substantial support in certain belated groups, or parties, whose members have received the benefits of many wonderful developments in certain fields of modern knowledge, but who are, none the less, pitifully ignorant of the no less wonderful developments in these more central aspects of human experience. We may even see how scientists may come to be peculiarly obstinate obstacles to the developments of psychology, and, therefore, to a more effectual education. Especially shall we see that in practically all educational practice the child is still treated as being a passive recipient of the world of nature and culture. Kant's wonderful conception that the mind shall be central in the active task of world building, that creative activity should be the true mark of experience-development, is lost to view. It is the Socratic doctrine returned to earth. But was not Socrates put to death; and did not his doctrines die with him? We shall see!

CHAPTER XXXI

THE PSYCHOLOGICAL INTERPRETATION OF EDUCATION

PESTALOZZI

SINCE Kant there have been two fundamental tendencies in the field of educational discussion, aside from the common run of traditional practice which has gone on and still goes on, but is little affected by theoretical discussions. On the one hand, of course, such discussion has been constantly determined and controlled by the growing insight which the study of psychology has given; that is to say, one of the two tendencies has had as its chief guide the growing science of psychology, and it has attempted to become consciously psychological. This tendency has gradually become more and more aware of its problem or problems, and has gradually worked for a more complete elaboration of its analysis and its tools, until now it seems to be entering upon a stage wherein it will be almost as sure of its functions as any of the applied sciences,—though, of course, it is by no means as certain of its methods, or even of its data, as are these other less personal but more objective lines of constructive effort. On the other hand, however, there is still a large measure of educational discussion that goes on practically oblivious to the fact that psychology exists. It works over old materials and concepts, or new ones, in good seventeenth century fashion; it sticks to the old traditions and methods, as if Kant's "Copernican revolution in thinking" had never been suggested. Such unintelligent discussion muddles things immeasurably. It is ignorant of its own ignorance, being intelligent only in some department

of knowledge, science, language, or application of knowledge, and caring nothing for the theory of its own practices or the intelligent criticism of those practices which psychology could offer. Among representatives of this tendency psychology is sometimes accepted as profitable *material* of education—stuff to be learned. But it has no bearing on the *processes* of learning! *Theory,* the one means by which thinking has been liberated from the control of old fables in the fields of physics and chemistry and the sciences generally, is looked upon with suspicion as a means of liberating men's practices in those fields where liberation is most necessary,—that is, in the field of education. And this tendency is frequently found among leading thinkers,—scientists who in their own special lines have become wonderfully liberated. One of the greatest obstacles to educational progress to-day is found in the failure of many leading educators to recognize the fact that psychology bears something of the same relationship to education that physics bears to engineering.

We must first follow out briefly the preliminary course of this new psychological movement in education, in order that we may catch some glimpse of the problems that are still to be solved. Three great names appear in close relationship—Pestalozzi, Herbart, and Froebel.

Pestalozzi.—Johann Heinrich Pestalozzi (1746–1827) was the first notable representative of this new tendency to consider educational problems from within the pupil's experience. He was more than a teacher in the schools. He was a public educational reformer, a social leader in the revolutionary reconstructions of the eighteenth and nineteenth centuries, and a Swiss patriot—all in one, if this seems not too incredible. He first thought of becoming a religious leader, but he failed in his efforts to conduct the conventional religious services. He tried law, but he broke

down in health. Having some acquaintance with Rousseau, he decided to return to nature. At the age of twenty-one he burned all his books and turned farmer! He married at twenty-three. His little son, Jacobli, became his text-book, his laboratory, and his experimental school. Taking Rousseau's root ideas as his starting point, he worked away in the obscurity of his farm at the task of thinking through some of the problems that Rousseau had merely sighted. Then the children of the poor in his district attracted him, and he sought means of helping them to some contact with knowledge. Later, becoming poorer than the poor whom he was trying to help, he wrote the great book which is his finest contribution—"Leonard and Gertrude," a story of rural life in which he sets forth his views on social and educational reforms. Still later he became the keeper of a poorhouse for a time, hoping to find a chance to carry out his experiments with the children of the poor. But this lasted a very short while. Then he became a teacher in a school at Burgdorf,—on suspicion. Here for five years he worked with little children from five to eight years old, and achieved success and fame. Here he wrote and published "How Gertrude Teaches Her Children," which sets forth most fully the fundamental conceptions upon which his work was based. After 1805 he went to Yverdun, where for a number of years he continued his brilliant work. Then came many years of private and public misunderstandings, and at last the breakdown of a brilliant career.

Pestalozzi's Educational Aims.—Pestalozzi was not, as we have said, merely a teacher in the schools. He was educator, reformer, and patriot, and he sought to deal with education as a great social function. He would extend the provisions for education to all the people. The lower classes, he insists, have "precisely the same right to enjoy the light of the sun" as have the upper classes. Not only that alone.

The only way society can be saved from its poverty, its misery, and its moral degradation is by extending education to every individual child. But this great social ideal would be the most formal and barren of useless dreams unless the educational institutions and methods were made over in conformity with the finer ideals of the times. Hence Pestalozzi undertakes the appalling task of psychologizing education. He has the "natural" spirit of Rousseau; and with it he has something of the psychological insight of the best leaders of that line of development, especially Kant and Fichte. And he starts upon the long task, not even to-day fully begun, with the joy of certain achievement. His educational creed has been summarized by his biographer, Morf, in the following formal statements:

Observation is the foundation of instruction.

Language must be connected with observation.

The time for learning is not the time for judgment and criticism.

In each branch, instruction must begin with the simplest elements, and proceed gradually by following the child's development; that is, by a series of steps that are psychologically connected.

A pause must be made at each stage of the instruction sufficiently long for the child to get the new matter thoroughly into his grasp and under his control.

Teaching must follow the path of development, and not that of dogmatic exposition.

The individuality of the pupil must be sacred for the teacher.

The chief aim of elementary instruction is not to furnish the child with knowledge and talents, but to develop and increase the powers of his mind.

To knowledge must be joined power; to what is known, the ability to turn it to account.

The relation between master and pupil, especially so far as discipline is concerned, must be established and regulated by love.

Instruction must be subordinated to the higher end of education.[1]

Pestalozzi works for the "development of human nature and the harmonious cultivation of its powers and talents." He finds that use—exercise—is the only means of development these powers possess. Work—activity of a constructive sort—is the surest of all means of growth, for "man is much more truly developed through that which he does than through that which he learns." But especially human nature in the child must come into actual contact with the realities of the world of experience, must get its actual impressions from real experiences, must have its intuitions cultivated by feeling the impress of the physical world-order on its physical nature, the impress of the moral world-order on its moral nature, etc. This actual intuition of the realities of the world on the part of the child must be fixed in experience by further observation and by exercise. Words stand in the way of education, dulling the powers of the mind and destroying the sensibility of the mind to the realities of the world. Sense-experiences must always form the basis of all lasting education. Yet at last these "experiences must be clearly expressed in words, or otherwise there arises the same danger that characterizes the dominant word teaching," i.e., lack of understanding of words, and hence the erroneous use of words.

In a word, Pestalozzi, interested in nature, uses the materials of the sense-world in his teaching. But whereas the older sense-realists had attempted to store the minds of their pupils with the materials of nature, Pestalozzi, following the lead of Rousseau in the recognition of the self-activity of the child and the lead of Kant in (his "Copernican revolution") in his recognition of the creative activity of the mind in all learning processes, attempts to build up nature

[1] Quoted by Graves: "Great Educators of Three Centuries," p. 136.

in the experience of each of his pupils by the working of their own creative minds. He works from the inside, not from the outside of the minds of his pupils. Nature is not a finished product to begin with; it is the final product in the experience of his pupils. The final form of knowledge is acquired through the development of ideas. Ideas gradually emerge out of a "swimming sea of confused sense-impressions"; they become definite through critical contrast with objects and other ideas.

All this is based on the idea of self-activity and self-development. The teacher's real business is to give a "helping hand to the instructive efforts after self-development." The child must learn how to observe carefully, since sense-perception is the basis of all mental development, especially of judgment and thought. "We get knowledge by our own investigations, not by endless talk about the results of art and science." After sense-perception, analysis of experience must be developed. "We put our children on the road which the discoverer of the subject himself took."

All in all, Pestalozzi rises rather fully to certain constructive details of the great psychological task. It is true that some of his efforts are more or less unreal. For example, his plan to psychologize education was rather fantastic, at least, in so far as it involved the reducing of all the materials of education to psychological equivalents in the experiences of children. Such a proposal is very fascinating. But as a predigesting of educational materials it is open to the objection that meets all proposals to feed the world on predigested materials. It is not the predigestion of materials that is wanted; it is the proper understanding of, and adaptation to, the whole process of nutrition.

The Return to Materialism.—But this proposal, while it holds a certain valuable suggestion, is open to one other almost fatal objection: it seems to turn back upon materials

once more. It may be but the resurgence of that older materialism which was the favored solution for the educational problem in the seventeenth century. To be sure, this psychologizing of the materials seems to take mind into account; and it does, too, in a way, but not in an adequate way. Or, rather, it takes mind into account in a roundabout way. For, on the whole, this conception of Pestalozzi seems to use the mind merely as a sort of agency to selection of the proper materials for education. At any rate, we see his work gradually deteriorate, until once again materials are dominant. Pestalozzi, himself, recognized the danger of this return to the old ways. He says: "I cannot prevent the forms of my method from having the same fate as all other forms, which inevitably perish in the hands of men who are neither desirous nor capable of grasping their spirit." But the danger was not that others would not appreciate the method at its full value, though of course that happened in large measure. Pestalozzi, himself, did not escape from this formal tendency toward the emphasis upon old materials. In particular he emphasized the teaching of *words,* plain lists of words, though his method had been largely a revolt against the mere teaching of words; and he came, through a fallacious over-emphasis upon the doctrine of proceeding "from the simple to the complex," to a very curious belief that the whole process of education could be mechanized, that is, reduced to a system that should be as accurate as a piece of mechanism. The former of these tendencies shows Pestalozzianism as inculcating words that run far beyond the experience of the learner, which Pestalozzi justifies by saying that the "gain of what at this age is so complete a knowledge of lists of names, so various and comprehensive, is immeasurable in facilitating the subsequent instruction of children." This is materialistic formalism of the finest sort. The latter of these tendencies

shows Pestalozzi attempting to organize "every branch of popular knowledge or talent" in the form of a "graduated series of exercises, the starting point of which was within everybody's comprehension, and the unbroken action of which, always exercising the child's powers without exhausting them, resulted in a continuous, easy, and attractive progress in which knowledge and the application of knowledge were always intimately connected."

It would not be fair, however, to class Pestalozzi with the old sense-realists. He was primarily interested in those materials of education which come into experience through the senses by observation. His interest in *words* goes only so far as to suggest that the possession of long lists of words in the mind will be very helpful in dealing with the materials which observation brings to the mind for use. He feels with the sense-realists that the best education comes from the materials which they emphasized. But he has gone far enough beyond them to want these sense-materials to come into the mind in a natural manner, that is, psychologically. Hence he would chart out the mind as much as that is possible; then he would chart out these desirable materials, proceeding in them from the simple to the more complicated; and finally he would relate all these materials in definite fashion to the mental processes in such detailed and simple fashion that "schools would gradually almost cease to be necessary."

The work of Pestalozzi was a strong, constructive, heroic effort of a brave and patient life. He accomplished much by his inspiring work as teacher and by his insight into the processes of experience. But his own training was not complete enough to enable him to win to the far goal. Tradition was too firmly rooted in him to be easily overcome, and he broke down under the strain of years of privation and misunderstanding. He rose to high fame, and worthily so;

but he fell to partial obscurity and defeat before he died.

On the side of social reformation his work had broad and lasting influence; and he did much to popularize the movement for industrial education and the social care of juvenile delinquents. In an incidental way his theories affected the general curriculum, effecting changes in the teaching of the languages and the study of nature. But he did not succeed in psychologizing education. Indeed, it may almost be asserted that his doctrines played into the materialistic tradition by showing how close the materials of the mind can be made to relate themselves to mental processes. At any rate, Pestalozzianism is one of the many isms from which educational theory and practice must escape. More work along all lines, more analysis of the psychological and logical conditions under which learning takes place, will be necessary before the whole problem appears and the broader lines of solution begin to develop. The many-sided argument runs on from age to age; but intelligence is burrowing deeper into the task. Nothing less than the whole intellectual-moral life of humanity is the problem, and the process of development of that life is the goal. Pestalozzi contributes his share to the conversation and passes on. We turn to the next worker in the line of psychological analysis.

THE WORK OF HERBART AS EDUCATIONAL PSYCHOLOGIST

The second constructive educational thinker who followed the new psychological trend was Johann Friedrich Herbart (1776–1841). Herbart came under the influence of the new movement in his university career at Jena. It was not Kant, however, who first influenced him, but Fichte. The latter was himself a follower first in the new idealistic movement, but later became a constructive thinker in his own way. Herbart became a professional philosopher, as well as an educational psychologist, and this experience shows its

influence upon all his work. His aims are more philosophical (as opposed to being merely psychological) than are those of Pestalozzi. Indeed, he felt it necessary to criticize the rather raw sense-methods of Pestalozzi. He considered the ordinary observation which Pestalozzi esteemed so highly as being of uncertain value, because the undisciplined senses (as he argued) were scarcely capable of giving us reliable truth. He would correct these possibilities of error by means of an extreme discipline of the senses, which was to be secured, for example, by the serious study of mathematical forms.

Herbart's Educational Aims.—Herbart believed that education was worthy of becoming a science in its own right. He felt keenly the rather superficial views of most educators of the past. He saw that most of the educational thinking of the past had been largely made up of unconsidered generalities on the basis of naïve assumptions. In other words, he saw that educational thinking had been largely devoted to making explicit the unintelligent practices of the folkways of the past. Herbart would make educational procedure fully and wholly intelligent. Its aim must be an intelligent one—the actual development of a moral personality. Its methods must go far beyond the common practice, on the one hand, and the doubtful theories of recent writers, on the other. Common practice was fallacious, of course, because it assumed that morality was a more or less unpredictable element, not to be attained by any particular exertion on the part of the teacher. Locke was a bad guide in that his whole scheme of education was merely the cultivation of the conventional man of the world, who, of course, would not rise above the levels of convention. Rousseau was a bad guide because his whole scheme of education looked to the development of a natural man who, of course, should "repeat from the be-

ginning the succession of evils already overcome'' by the race in its progress toward civilization. Herbart would substitute for all such inadequate conceptions and practices the method of instruction. He would lay out before the teacher the whole structure of the mental life, with all its possibilities, and he would have a teacher who could then succeed in introducing into the full workings of that human mental life all the elements that should be needed in the final summation of a complete moral personality. He would have all these results come as the natural working of the principles of instruction carried on according to the real nature of the individual.

Herbart's Conception of Method.—The moral ideal demands a certain concentration of effort toward a rather distinct goal. In order to make sure that this effort should not result in a narrowly dogmatic type of character, Herbart insists that education must maintain and develop ''many-sidedness of interest.'' Herbart does not seem to have based this demand upon the modern conception of many-sidedness of native capacity,—such a conception had not yet appeared as a working guide,—although he does insist that the early education of the child can best be secured through the use of such materials as the Odyssey. Rather, he bases the possibility of the development of a many-sided interest on the working of reflection. Reflective thought must be so developed as to make sure that life shall have many aspects, many references, and many interests.

How shall this reflective thought be thus secured? Herbart has worked out a definite, formal method by which to make sure of this development. Originally this method was based on four distinctive steps in the process of thinking, as follows: clearing up of ideas already in the mind, presentation of new ideas, association of the new ideas with the old mental contents, and application of these new contents

in practice. We shall see later the full results of this procedure. We must now follow Herbart's psychology a little further.

Herbart is distinctly what may be called an intellectualist. That is to say, for him ideas are the primary characteristic of the mind—the mind being in one sense just a series of masses of ideas, each of which, with more or less persistence and regularity, occupies the center of consciousness, rising above the threshold of consciousness for a time and then falling below that threshold. Ideas are the prime reality, the real force of the mind and of the world. Will, itself, is but a sort of special form of intellectual activity, as are also interest, feeling, and desire. In such a system it will be readily seen that the chief problem in moral development is that of bringing the proper ideas into the mind, getting them into the circle of thought, since in this way these ideas would thus get in their work upon the will. But ideas are forces, and those that are in the mind are in constant battle for the possession of consciousness, fighting with each other for the central position of power and of course joining hands, as we might say, in their common fight to prevent the intrusion of any other ideas not distinctly related in character to those already within the mind. That is to say, Herbart conceives of these ideas as being actively engaged in the fight for a place in the mind, combining with each other for mutual help and attacking each other, their modes of combination being regular and ascertainable. He even goes so far as to work out those modes of relationships in exact mathematical terms.

Apperception.—This discussion will help to make clear the celebrated doctrine of apperception, which two decades ago seemed to offer the long-sought clue to the educational millennium. Herbart conceives of the mind as being thus constituted of masses of ideas, each with its own character-

istic nature. These various masses of ideas welcome other ideas which seem to possess the same general character, and which will therefore strengthen the fight of these former ideas for their dominant position in the mind. These masses of old ideas not only welcome all new ideas of a similar character, but they take in the new ideas; they assimilate them and make them part of the existent mass. So that every new idea taken into the mind swells its particular existent mass of ideas and makes easier the entrance of other ideas of the same general type; and, by the same token, this makes more difficult the entrance of ideas of another type. These previously existent masses of ideas are the famous "apperception masses." They welcome, assimilate, and organize into themselves the new ideas. They thus give vital significance to all new materials taken into the mind, in that way adding to perception.

There is a certain obvious value in this doctrine of apperception: it shows the tremendous importance of building up proper apperception masses in the experience of the child. If the present contents of the mind have such determining influence upon later contents, educational destiny may almost be said to depend upon the early beginnings of the process. But there is another item of equal importance. Ideas not only welcome some ideas; they also fight the entrance of other ideas. And this fight against certain new ideas may not be due to any *moral* difference in the nature of the new ideas, though doubtless this is frequently the case. The reason for the attitude of conflict upon the part of the old ideas toward the new may be due to a wide gap in the logical organization of the new, so that even though the new ideas are distinctly of the same general character as the old, yet they are not recognized by the old. They have no logical similarity of characteristics, and they are fought on the general ground that always identifies the un-

like with dislike. This indicates the extreme importance of making the curriculum correspond to the stages of development of the child's experience. And this leads to several striking results. In the first place, and in its smaller aspect, the materials of the curriculum must be arranged in an ascending scale of growing complexity, corresponding to the probable complexities in the experiences of growing childhood. In the second place, and from the larger point of view, it is likely that this proper organization of the studies will show that the best presentation is that which follows,—at least in great epochs,—the history of the development of those studies in the experience of the race. Thus appears the celebrated theory of culture epochs, which finds in the history of the race the clue to the proper organization of the subject-matter of the modern school curriculum. This theory is, of course, also closely related to the theory of recapitulation, according to which the child develops a series of native activities or capacities or instincts in the same general order in which those capacities were developed in the history of the race. But the whole topic is far too extensive for this present treatment.

One summary statement must conclude this topic. Herbart himself sums up the whole matter of apperception in its relation to the main aim of education, that is, to morality, in the sentence, "Instruction will form the circle of thought, and the circle of thought the character." And of such a system of psychology and education it were not altogether difficult to understand why a certain leading Herbartian should say, "Teachers ought to accept it as true and to act under the assumption that it is true, whether it is true or not."

Some Results.—Herbart is remembered as psychologist and metaphysician, as well as educator. Indeed, it is likely that his educational doctrines are but elements in his gen-

eral metaphysic, and that they will suffer the fate of his general philosophy. There is a certain moral idealism in his teaching that cannot be escaped. And there is a certain pious hope that he has found the clue to mental life, and hence to instruction. But the doctrine of apperception has passed out of the psychologies; the word is scarcely to be found in the books of to-day. That does not mean that what Herbart tried to describe under that name does not exist. It simply means that it is at present much better described from another point of view and under another title. Herbart's psychology was associative in its basic features. In an associative psychology ideas merely attach themselves to each other like beads on a string; there is no necessary interaction among them. Herbart felt the unreality of this conception; but the evolutionary conception of an actively reconstructive mental life had not developed. If ideas were to have internal relationships to each other, some special means of action must be set forth. Perception, itself, being but the means by which ideas became associated together, something must be added to perception to bring them into organic interrelationship. Hence we get apperception, or something added to perception. To-day, however, perception is itself described as an active process which involves all the functions of the mind in the interpretation of new experiences. Hence perception now performs all the functions covered by Herbart's apperception.

Herbart's psychology is material for criticism to-day. Herbart's formal method has suffered in a somewhat similar manner. To him, as we have seen, formal method implied a following of the generalized stages of development by which the mind takes into itself new materials. That is to say, Herbart himself always remained a psychologist in his handling of the problems of education. But his most ardent followers, chief of whom have been English and American

thinkers, have tended to fall away from the psychological point of view and to once more become materialists in the seventeenth century sense. That is to say, in the hands of his followers method has largely ceased to be stages of development in the learning process and has become, instead, stages of development in the organization of materials. In place of the four formal steps by which the mind apprehended the materials of the world and applied them to the larger uses of life, we find in the later Herbartians five formal steps in the development of the materials of the lesson—preparation, presentation, association, generalization, and application. It has been frequently set forth that few people seem to have the power of dealing thoroughly with the problem of method. The greater part fall away from that rather abstract problem to the concrete problem of reorganizing a curriculum in such way as to fulfil the demands of method as they understand it. The organization of the mind comes to be assumed as explicit and settled. The really constructive task is that of organizing the materials of knowledge so that these will correspond with the organization of the mind. The Herbartians did not escape this fate.

But the futility of such a procedure has been rather clearly recognized. As evidence of this it may be pointed out that in the late decades of the nineteenth century, under the stimulus of the Herbartian movement in America, the National Herbart Society was organized. This organization carried on investigation of the Herbartian system and propaganda for the purpose of spreading the doctrine. But under the influence of constructive criticism from practical school-men and from psychological laboratories the system soon lost its dominating influence. Herbart fell back from his rather overwhelming importance in American educational procedure, and the purposes of the organization were

so far altered by the shifting conditions in theory and in practice that the name of the society was changed, early in the twentieth century, from the National Herbart Society to the Society for the Scientific Study of Education. That is to say, consideration of the whole broad problem of education was to take the place of the study and propagation of the doctrines of a particular man. But it is no small testimonial to the values in the work of Herbart that he could thus transmute his discipleship into the broader discipleship of the scientific problem itself. And it may be said, in closing this study, that Herbart did not contribute much to the solution of the problems of educational psychology. That would have been impossible so early in the discussion. He rather contributed to a clearer conception of the exact nature of the problem. That is to say, he did not leave an answer to the problem; he left a more complete statement of the problem for future analysis.

Herbart differs from Pestalozzi in one fundamental particular. Pestalozzi was profoundly interested in the way in which we build up a world for our uses through the activities of the senses. Herbart is primarily interested in the world that is revealed to us through our ideas. He finds in history a great world of social and moral values, just as Pestalozzi finds about us a great world of nature. Herbart's question is this: How shall the child be enabled to build for himself, for the uses of his life, this larger world of morality? Herbart sees that such a world, if it is to arise at all, must arise in and through the *thinking* of the individual. Hence he is primarily interested in the processes of our thoughts, the activities of our ideas, and how that activity of the mind actually passes over into the substance of our world of action. He loses sight, in large measure, of the problem set by Pestalozzi; but he sets the whole problem in a larger scale.

Herbart's influence upon American educational discussion has been very marked. It is doubtful, however, just what value that influence has had. He certainly succeeded in compelling educators to think about what they were doing. He broke up old routines and traditions, and he insisted that education should be the subject of intelligent discussion. But while he attempts to deal with the process in psychological terms, his psychology is so inadequate, so mechanical, that he does not get far. Instead, he turns aside to deal with materials, to organize materials in the proper sequence for presentation to the mind. Professor Dewey says of Herbart's method: "The theory represents the schoolmaster come to his own. . . . The conception that the mind consists of what has been taught . . . reflects the pedagogue's view of life. The philosophy is eloquent about the duty of the teacher in instructing the pupils; it is almost silent regarding his privilege of learning." That is to say, once more we are back among the materials. The teacher is to inculcate; the pupil is to passively "take on" the materials; and Kant, with his Copernican revolution in thinking which sets forth the doctrine that the mind is to be active in the construction of its own experience-world, is forgotten.

Hence Herbart, having done his work of emphasizing the problem, must pass on. And once more we turn hopefully to a new adventure into the mazes of the problem.

FROEBEL AND THE KINDERGARTEN MOVEMENT

Herbart had set the problem of educational analysis on the high levels of intellectual and ethical realization. This is, of course, the most important aspect of the whole question, and Herbart advanced a statement of it which for a time was thought to be the final solution of the problem.

But we can now see that his work was but one of the many necessary steps in the great social discussion,—a very valuable discussion, but one which brought with it certain erroneous conclusions and which is to be regarded as in no sense really final. We must turn back upon the road by which he came and pick up some of the threads which he ignored. We turn to Froebel, the third of this great group who followed the general lead of the new psychological movement.

Friedrich Froebel (1782–1852).—Froebel's childhood was not a happy one. After a varied career as boy and youth, he finally found the chance to enter upon the study of education. He visited Pestalozzi at the age of twenty-three, and later as a teacher he lived close to the Pestalozzian school atYverdun. Later he entered the University of Göttingen, determined to find out how to educate human beings in scientific fashion. Here he did not particularly study children, or even adults; nor did he devote his time to philosophy and psychology. Rather, he assumed that the life of man had been lived in the world, the world of objects; hence, he assumed that a study of the world of objects would bring him closer to a clue to the processes of development of human experience than would a direct study of that experience. Later he did study the works of Rousseau, Pestalozzi, and Fichte, thus bringing together the results of his own study of the world within which men have grown up, and the results of the study of these great thinkers on the problem of the experience that has been developed within this world. He thus brought together the two essential aspects of the problem of educational psychology. At the age of thirty-four Froebel became the guardian of his brother's children, and he conceived the idea of making these children the nucleus of a school that should embody his growing

conceptions of education. This resulted in the Universal German Educational Institute, to which came many leading educators of the time.

In 1826 Froebel published his "Education of Man." In 1840 he opened the first kindergarten at Blankenburg. The idea spread, and in a few years kindergartens had become common in Germany. This institution was developed, it will be noted, in Fröebel's mature years. He thought of it as an institution which should undertake to develop the child as an organism, knowing the nature of the organism that was to be developed and making an environment that should stimulate the sort of organic development that seemed desirable. This is the most admirable statement yet developed of the whole process of education. But it was far too liberal. It was the fate of Froebel's work that it should develop to this height in the days of the great liberal movement which culminated in the revolution of 1848; and it was also fated that it should be almost the first to feel the heavy hand of reaction which followed hard upon those constructive years. Raumer, reactionary minister of education, felt the dangers of such an organic education. In 1851 he ordered all kindergartens closed throughout the whole kingdom of Prussia. Froebel did not long survive this blow at his cherished projects. He died in 1852.

Comparison of Froebel with His Predecessors.—Pestalozzi worked out in some degree in the field of nature the general psychological proposals of Kant, while Herbart performed a somewhat similar service in the field of history. Each saw fairly clearly the meanings of Kant's revolutionary doctrines as to the *aim* of education, but each failed rather conclusively in the matter of stating these new aims in the form of new and logically organized *method;* and, of course, if this psychological movement was to stand for anything, it must be for method, rather than for either materials

or aims. Froebel understood, at least in some measure, the failure of psychology to comprehend this problem of method. In his own work he undertook to remedy the defect. All his work is essentially in the field of method. He is not yet master in this field, as is shown by the fact that he devotes too much of his energy to the working out of mere *devices;* but he goes far beyond any other man of his time in the working out of the problem. However, he never succeeded in working out the significance of his method for the years beyond the kindergarten age; but, for that matter, those years have not, even yet, been successfully analyzed.

Froebel's Method.—Froebel accepts the psychological point of view almost completely. The fundamental clue to the process of education he finds in his doctrine of the *self-activity of the child.* Pestalozzi had touched upon this, but Herbart, by his emphasis upon the primary nature of ideas, had been compelled to largely ignore it and to atone for its loss by introducing the doctrine of apperception. But Froebel holds conclusively to the rather advanced, even evolutionary, doctrine that children are, in their own right, naturally and natively active. It is not the teacher's business to get them to act. It is the business of the school to accept this principle of activity and make the most of it. It is the teacher's work to surround the active child with a rich world of possible experiences, so that in all their activity the children will be choosing constructive acts and building up a world of experience that shall be socially and ethically desirable,—a world that is in accordance with the principles of the good life. It is the business of teachers of whatever sort to *live* with their children, and not merely to teach them.

But living with children means much more than mere personal presence; it is much more than mere intellectual performance. It particularly involves the development of

a world of action for the children within which they will find the stimulations and the opportunities for a normal sort of life. They are *self-active,* as we have seen. Through a sort of philosophical mysticism Froebel finds God, expressed in universal law and underlying unity, in all things. He thinks of children as possessed of an original, unmarred nature, which should be given proper opportunity to develop. The teacher is to make possible the development of this inner nature.

It is this expression of the inner life that marks out Froebel's doctrine as of peculiar importance. He says, "Never forget that the essential business of the school is not so much to teach and to communicate a large and varied assortment of things as it is to bring out into expression the ever-living unity that is in all things." Education should not command; it should nurture and cultivate. All outward action is to be the expression of the inner life. In a sense it is to be more, indeed. It is to be the expression of that great universal spirit that underlies all existence, which is the divine unity of existence. Stripped of its peculiar philosophical and religious phraseology, this doctrine is not far removed from much of the later evolutionary doctrine.

Froebel's Psychology.—Froebel's psychology shows some wonderful insight and some strange lapses. It is too extensive a subject to be developed here; but it may be said, on the side of his larger insight, that he recognized the manner in which the world of objects develops in the child's mind. Objects do not stand forth fully-made in the perceptions of the child; they come into his experience in the actual development of that experience and through the slow growth of the powers of sensation, perception, and finally of thought. But he rather curiously supposes that all development is by a conflict between opposite powers, capacities, and sensibilities. So he sets sensations over

against each other in rather mechanical fashion. His psychology was inevitably warped by his religious interests and his pedagogical aims.

Again, we must note that his general doctrine of education, which grew out of his religious and philosophical interests, implies a psychology of unfolding—that is to say, all that is to be in the long experience of the individual is infolded within the child at birth; and all that a proper education can rightly do is to endeavor to unfold this previously infolded life. There is doubtless a great truth here—that the whole career of the child is closely bound up in the problems of his heredity. But there is also a great fallacy—that education involves no new factors, produces no reconstructions. Perhaps Froebel did not intend this in any narrow sense. In many respects he sets forth doctrines which are close to the evolutionary doctrines so soon to be developed, but the full significance of the evolutionary movement—the work of Darwin—was not presented in Froebel's lifetime. Hence he could scarcely conceive of an evolving environment, that is to say, an environment expressing continuous change, whose educational significance would therefore be continuously changing. For Froebel, like all other pioneers, was fighting his way through unknown regions, exploring the hidden reaches of human nature. He did not always find reliable results. He sometimes mistook hopes for realities, and he saw some great highways of educational commerce, where now we can see little but blind alleys. For example, he over-emphasized what he calls "gifts," a doctrine which has proved itself to be merely the older conception of a formal discipline illustrated by means of objects.

But the general doctrine of the *self-activity* of the child underlies every constructive educational theory and every effective educational practice of the present; and the kin-

dergarten, at its best, is a complete demonstration of this fact. That much, at least, has been gained by Froebel's work, and it will never pass away. To be sure, some of his followers have mistaken the husk of the doctrine for the kernel, and they have attempted to make the kindergarten a place of definitely formal discipline through the use of chosen materials. Froebel's gifts have not infrequently been erected into ultimate educational materials. His doctrines have become almost sacred in the thought of some, so that a certain type of kindergartner still takes the literal words of Froebel with something of the sacred finality of the medieval religious devotee. But a prophet cannot be held responsible for the follies of all his followers.

The whole story of the work of Froebel should be taken up in his own writings, mainly in the "Education of Man," in which he deals with the fundamental moral and religious problems of education and expresses his conclusions in the doctrine of activity and in the working out of a curriculum which should secure "the union of the school and life, of domestic and scholastic life." Also in his "Pedagogics of the Kindergarten," in which he develops his theory of symbolism, a theory which has been such a stumbling-block to the literalists among his followers. To a man of great mystical nature, a poet, such words as the following are helpful and harmless: "The cube is to the child the representative of each continually developing manifold body. The child has an intimation in it of the unity which lies at the foundation of all manifoldness and from which the latter proceeds." But to a later literalistic follower such words can bring nothing but confusion, the straining to get something out of a cube which is not there, to impress children with meanings that do not exist. As Professor Dewey says, "We often teach insincerity, and instill sentimentalism, and foster sensationalism when we

think we are teaching truths by means of symbols." Or, as Professor Thorndike suggests in his "Notes on Child Study," "If we (adults) live in houses because they symbolize protection, if we like to see Sherlock Holmes on the stage because he symbolizes craft to us . . . if we eat apples because they symbolize to us the fall of man, . . . then perhaps the children play with the ball because it symbolizes to them 'infinite development and absolute limitation.' "

Of course it is not fair to blame all perversions of meaning upon an author. And it is not so certain as some of the modern psychologists seem to think that children get no symbolic meanings out of objects; undoubtedly the vague, far roots of later ideal meanings are hidden in the soil of the child's experiences. Pestalozzi hoped to "mechanize instruction"; but that fails because it is too completely materialistic. Froebel hopes to "spiritualize instruction"; but that fails because it does not give us any clue whatever to the methods of control. But just as we still work for a more complete understanding of the mechanics of instruction, so we still work for a more essential grasp upon the meanings of education. Hence we can be grateful for the contributions that Froebel has made, while at the same time denying the validity of many of his proposals and still more the fantastic misinterpretations which his literal followers have made of his legitimate doctrines. The general spirit of his work was wholly constructive, and he probably approaches nearest to a full expression of the significance of education and the modes of its development of any of the nineteenth century workers. But his work is confined to the period of infancy, within which the task of organization is comparatively simple. The extension of the same principles to the later years,—that is, the working out of the methods by which this same principle of self-activity

can be conserved and depended upon all through the years of youth and on into the adult years,—is one of the larger aspects of the whole educational problem of the present. Not in his mysticism, nor even in his nobler idealism, are we to look for the real significance of Fröebel's work. It is in his emphasis upon the self-activity of the child—the child not merely as an *object* to be educated, but as the *subject* of his own education.

After Froebel.—With Froebel we come to the end of the line of constructive educational thinkers in the psychological succession until near the close of the nineteenth century, when the new movement in educational psychology begins. Pestalozzi of course had his followers in Europe and America; Herbart started a great wave of investigation and propaganda that became the dominant influence in America for twenty years, during the latter part of the nineteenth and the beginning of the twentieth century; Froebel and his kindergartens are with us more and more. But no one of these interpretations of educational processes is complete or final, and work that is done in the traditional succession of any one of these is not final. Each of these represents a very necessary element in the larger synthesis of the educational movement, but each by itself is out of equilibrium. That fact, however, is one of the conditions of movement, of progress; and the pioneer work of these three great leaders will stimulate further thinking for centuries.

Perhaps these contributions were as complete as the age in which they were made could endure or understand. Even to-day the psychological point of view is still unacceptable to many types of teachers. Perhaps, too, the general background of life and thought made more conclusive work impossible. We must remember that the old conceptions of the origin and nature of life still prevailed, that evolutionism had not yet arisen. Perhaps the world must

catch up in its thinking along many other lines before this psychological statement of education can either be complete in itself or be convincing to the world. When Kant attempted to stand on the heights of philosophy and psychology, in order that he might see all *parts* of human experience from the standpoint of the *whole,* he still stood in the midst of preëvolutionary conceptions of human nature and experience. But in the middle of the nineteenth century all this began to change. Darwin gave to the world his revolutionary theory of the origin and nature of life, including human life, and in the succeeding years, even until the present, the conviction has slowly grown that this general conception of evolution must be applied to every phase of our understanding of the world. Man takes his place as in and of the universe. His physical life is continuous with the common story of life upon the earth; his institutions are a part of the whole story of restless history. Psychology therefore must become the study of the whole of life and mind, not merely of the exclusive mind of man. Here at last man sinks into his proper setting in the general movement of universal evolution. He can be no longer studied apart, separate, and alone, for his being is one with the nature of the world. And if he rises above the world in intellectual or moral dignity, that will be an achievement, not a gift.

The meaning of evolution for our study of education will accordingly concern us next, and to that we now turn.

CHAPTER XXXII

THE CULMINATION IN EVOLUTION

Our whole study up to the present has shown us the long spectacle of a more or less continuous conflict between two definite tendencies in human nature. We have been calling these tendencies after the fashion of their continuous manifestations. On the one hand we have had the folkways, with their social customs and traditions, and their individual expressions in habit and conformity; on the other hand we have seen the recurrent expressions of revolt, of innovation and invention, and the demand that room shall be provided for growth and change. Both these aspects of life are natural; both are persistent; and each has its characteristic implications for the full statement of human experience. We have seen how the former, the folkway type, attempted to state all aspects of human life and hope and destiny in terms of one, great, all-inclusive system of practice and theory in medievalism. We have seen how the other phase of experience had its representatives and its expressions all through the ages, even when such expressions were distinctly not socially accepted. But until far down in the modern period no satisfactory theory of the attitude of revolt or of change had come to clear statement, despite the fact that many revolutions had transpired and many changes had taken place. Men were doing things under the pressure of events which no acceptable theory or philosophy had been able to justify. The attitude of innovation, represented in the work of Socrates, Jesus, Martin Luther, and Rousseau, while it expressed the *hopes* of

mankind, as over against the tragic stagnation of the folkway ideal, had no conclusive argument to offer in its own justification until the middle of the nineteenth century. Then, not suddenly, but none the less with a considerable emotional shock to the world, all these constructive and progressive movements and hopes of the past seemed to find their complete statement and justification in the theory of evolution.

Antecedents of the Evolutionary Doctrine.—The orthodox doctrine underlying all old folkway social orders describes the world in final terms. The world was created at a rather definite time by the work of a special Creator; life was created, also, and put into the world; and man was created in the same way and put into the world, being given command to master the world and learn it. At the same time and in the same manner all our social, industrial, political, religious, and educational institutions were created and given to men. Human life was planned out from the first; its habitat was established, its limitations determined upon, its destiny decided, and its institutions properly set forth. This attitude of mind is rather vague in the primitive folkways, but it develops detail in the course of history and becomes fully elaborated and explicit in the highest stage of medieval organization.

But in the early decades of the nineteenth century this old theory began to fall to pieces, and by the middle of the century another doctrine had been quite fully elaborated. The older theory had been undermined by century-long explorations in many lines, following the lead of age-old human hopes and activities. Geology was beginning to show that the earth had had a long history and that it was still in the processes of creation. Paleontology was showing that living forms had had a gradual development from the more simple to the more complicated. Comparative

anatomy was showing similarities and parallelisms of development among all forms of animal life. Anthropology was demonstrating the long struggle of human life upward from the near-brutish.

Again, philosophy had been trying for centuries to find some inclusive statement of the nature of the world which would still leave room for change. Kantian psychology had opened the way to a theory of growth by setting up its theory of the creativeness of the inner life. Following Kant, Hegel in particular urges this doctrine of development, with the gradual emergence of new forms, new functions, and new meanings. For Hegel (at least until he comes to his Absolute), the significance of life is found not in what is, or in what has been done, but in what has been promised, and the permanence and security of life are found in the fact of change. That which becomes final, degenerates. The security of life can be assured only in so far as continuous change can be assured. The striking feature of this doctrine is this: that all the struggle of history is but the effort of the absolute to free itself from the bounds of the unconscious and to become fully conscious. Despite the fact that Hegel rather assumed that in his own philosophy the absolute had finally achieved this aim, this doctrine of the evolution of the absolute helps to prepare the world for the more real doctrine of evolution. Herbert Spencer's work in various fields of scientific and philosophical speculation helped to prepare the way for the coming of the culminating work, the "Theory of Evolution," in the presentations of Charles Darwin and Alfred Russell Wallace.

The Significance of the Doctrine.—The theory of evolution stands for many things, not all of which are either true or equally important. Its simplest statement might be set forth in such words as these, "Everything has a history."

For our purposes in this study we may say that it suggests some such principles as the following: the inadequacy of certain old doctrines of the origin of the world; the interrelationship of all forms of life upon the earth; the more or less gradual development and complication of the organic structures of animal and human life, especially the coördinate development of neural and muscular systems as means of control in the struggles of living forms with their organic and inorganic environmental conditions; the continuity of life from the lowest to the highest forms; and the final denial of the adequacy of the Aristotelian type of logic as a complete description of the forms of human thinking.

The evolutionary doctrine throws a reflected light back over all the past and clears up many things that have appeared strange all along our way. History has been an evolution,—we can see and say that now,—though it has always been interpreted as a fixed system and a final order, The first interpretations of the world were, as we have seen, *folkway interpretations,* developed in the midst of relatively fixed conditions of the primitive group. These earliest interpretations always assume the special creation of the world. Everything that is in the world was likewise created. Man was created, put into the world, and told to learn it, conquer it, and control it. That was seemingly a process to be gone through with once; after that the world of things should have become a world of knowledge, of fixed ways of living, of fixed social organization, of fixed interpretations of all things, and of finished processes of development.

Of course these fixed systems would never remain fixed; and there have always been embarrassing difficulties in getting from one of these final stages to the next one. But such logical jumps have been made by all peoples in all

stages of their development, so that it would almost seem as if there had developed during the course of the ages a sort of gentleman's agreement not to notice this fatal defect in the folkway logic. At any rate, the persistent tendency of the folkway attitude is to reduce the whole of life to habit, custom, and tradition. And this tendency includes within its scope all aspects of the social world, so that the social institutions are as much a part of the final nature of things as are the physical features of the earth. "Jehovah ended his work on the seventh day; and he rested on the seventh day from *all* his work."

This creation theory assumes that the world was put together from the outside; there seems to be nothing of life and growth within the process itself. Plants and animals were all made; man, himself, was "formed" and the breath of life was "breathed into him"; a fixed nature was set up for him, with "everything created after its kind." And it is the obvious implication of this theory that all man's life is laid out for him as fixedly as any other aspect of the creation was determined. Some such story as this appears practically everywhere in the primitive group life.

Criticism of this Conception of the Nature of the World. —We have already seen how throughout history there have been those who have not been satisfied with this folkway interpretation of the meaning of human life and experience. Their dissatisfactions have been of the nature of impulse,—a primitive breath of original life, an energy of the will, rather than a clear idea. But evidence has slowly accumulated through the centuries. Revolutions have been fought out in all the major interests of life. The inner life of the race has revolted against the mechanisms of folkway existence of the Middle Ages, and the Renaissance is the result; the religious aspirations of the race have fought for freedom from the institutionalisms of the Middle Ages, and

the Reformation and Protestantism and religious liberalism are the result; the intellect demands its freedom from the "received opinions" of the scholastics, and science gradually rises out of the mass of common doctrine; the civic hope of the race breaks through all barriers of "divine right" and the like, and democracy becomes a progressive realization. All these are impulses, and they are fighting against dogmatisms, intellectualisms, and institutionalisms of all sorts. This is not fancy; it is the history of the race. And after many centuries the impulses of growth, revolt, and intelligence culminate. History comes to a new climax; a new theory of the nature of the world, of human life and human experience, is set forth, a theory that in dignity and significance is worthy to take its place alongside the older theory of the Middle Ages and to contend with that theory for the allegiance of the world. History thus becomes conscious of its own movements and its own inner workings in a new and deeper sense; it justifies the restlessness of its past and becomes avowedly and intentionally evolutionary in its ideals and its modes. And from this time forward history may be studied in the hope that the race will learn, at least in some measure, the processes of making history, so that the future will be somewhat under the control of human intention.

The Reinterpretation of the World According to Evolution.—Practically the whole structure of civilization had been built up under the dominance of the belief in the story of creation, including the creation of all the institutions of human life, and even human nature itself. This mechanical origin of the world justified the terrible inequalities and injustices of life and gave the sanction of religion to the continuance of these conditions. All the established privileges of the established orders of earth were bolstered up in the sacredness of the creation story. All the hopes

of the nobler social order of the future are involved in establishing that the creation story is no more sacred than the evolution story, and in the working out of the social method by which this evolutionary attitude can be made effective in all social relationships. The whole issue of civilization may be said to be joined at this point. Economic, social, political, ethical, religious, and educational values are concerned. It is the struggle between a mechanical order, implied in the theory of creation, and a living and personal order, implied in the theory of evolution. The creation theory presupposes a machine-world that, once set up, runs itself. All the institutionalisms of the past, from the folkways of the primitive world to the reactionisms of our present politico-industrial order, rely for their security upon this machine-world with its machine-logic. "Whatever is, is right." All the possibilities of realizing the hopes of a nobler living, socially and educationally,—such hopes as were implicit in the teachings of Socrates and Jesus,—must rely upon the development of this other theory, with its insistence that institutions shall be fluid enough to change as the conditions of living change; that man is superior to institutions; that institutions must serve human need; that institutions must submit to the judgment of the present; and that nothing has a right to exist save that which really serves human need in some genuine way.

Significance of this Theory for Education.—The full meanings of this revolution are not yet clear. Perhaps it is one of the implications of the doctrine that they will not ever all become clear. But we know enough about it to know that it means some very profound things for educational theory and practice. In the first place, education will be by evolution, rather than by external creation, if

the most obvious aspect of the theory is acknowledged. But such a statement may mean very little. Let us see.

There is now an evolutionary psychology which has its full significance for education. According to this psychology the mind of man is an instrument in the general process of living, not a basket to be filled with intellectual contents or wits to be sharpened for formal intellectual conflicts. Education comes, therefore, in the general processes of living, rather than in some abstract and usually unreal process of learning. All the institutions are elements in the process by which man has gained, and will continue to regain, control over the conditions in which he lives. All institutions are, therefore, subject to the reconstructive modes of experience. This will include the school. There was a time when schools, in the academic sense, did not exist. Education went on without their aid. They finally came in response to a definite need and for the accomplishment of definite purposes. Those needs and purposes are themselves the functions of changing conditions. The schools and education must be subject to the same changes. That education which was developed to meet a certain social function in a certain past age may well fail to serve the purposes of education in this age under changed conditions. But schools, like all institutions, are very conservative and loath to give up. They tend to maintain their existence long after that existence is constructively useful, because dealing with old informations, as they do so largely, they do not always recognize when their existence has ceased to be vital As a result, they not infrequently remain as a sort of second environment (to speak in evolutionary terms) over against the real environment of the child's active life. They may thus greatly complicate the educational problem, without greatly aiding in its solu-

tion. The schools may even accept the general theory of evolution and teach it as a sort of timeless doctrine, while at the same time retaining obstructive survivals of old methods of social functioning which, under the changed conditions of to-day, offer no convincing reason for their existence in their present form. Intelligence is not a fixed and final thing, created, uncovered, or invented once for all. It is as fluid as the conditions of existence. There is no end to the possibilities of its developments. But there is an ever-present blind alley into which intelligence is forever running and forever losing itself. This blind alley is *habit*. Blind alleys are extremely useful institutions for some purposes, but not for thoroughfares. The only escape from a blind alley is by way of the original entrance, or else by laying waste the fences of the neighborhood.

The theory of education has been wonderfully broadened in its scope by the development of the theory of evolution. All history now pays tribute to the education of the race, and all our social institutions and activities are now seen to be intimately related to the outcome of any educational effort. The theory of evolution has dramatized the mental life of man and made psychology the most intensely human of all studies—when it is studied humanly. The structure of civilization has been put upon broader and more secure bases—universal bases, we may say. The life of man has been integrated with the very nature of the world. He was not created and put into the world; he has grown up with the world, and the marks of its storms and stresses are in his features. He has whatever of permanence or reality the world itself possesses. All the rich and varied wealth of the world's physical and moral resources are available for his use as fast as he can uncover them and learn how to use them. They are his to use; they are not alien to his nature. They are of the essence of his nature,

and he is of theirs, since all are products of the same fundamental creative processes.

This intimacy between man and the world, out of which he is to make his real life, is of the utmost significance for education. No longer must the old doctrine of the antagonism between man's highest interests and the world stand in the way of the realization of human good; no longer shall the doctrine that the world belongs to the evil one paralyze human effort toward the good. The doctrine of evolution implies that, little by little, humanity will learn how to control the conditions of existence so that the really desirable elements of human good shall be realized. Evolutionary science has this aim: "The task of science is found in working out the conditions which will make a good life possible." Central in this task will be that of psychology, and especially educational psychology. We cannot see as yet all that this will mean for education. But we know that it will mean much, too, for democracy, for the pruning away of old social, moral, and religious excesses, and for the enlarging organization of society for intelligent purposes, in place of old folkway goals and the goals of blind impulse.

But such a broad and generous view of life will come to the world slowly. It will be fought by many influences, both open and insidious. Religion will fight it because it will seem to be altogether anti-religious; morality will fight it, for it seems to compel men to "reel back into the brute"; poetry will be enlisted against it.

> I think we are not wholly brain . . .
> Not merely cunning casts in clay . . .
> Let Science prove we are, and then,
> What matters Science unto men?

But little by little the meaning of the conception will dawn, and it will be seen that—

Life is not as idle ore,
But iron dug from central gloom,
And heated hot with burning fears,
And dipped in baths of hissing tears,
And battered with the shocks of doom,
To shape and use.

Strange as it may seem, perhaps the most vigorous objections to the new doctrines will come from scientists of the older type who are unable to make their adjustments to the new mood and attitude. The accomplishments of science in the past are all too apt to become obstacles to the further development of science. At any rate, as we go on with our story we shall see that not infrequently old science stands in the way of new science. But our studies in the logic of history, as set forth here, should save us from surprise. Science, itself, is no magic matter; as developed materials it is just as likely to become complacent of its accomplishments as any other body of materials ever became in any folkway age. Indeed, just because the methods of science seem so exact and final, the materials secured are not unlikely to bear a more definite mark of finality. The only assurance of the permanence of the scientific attitude is the recognition that science is not *materials* at all, but the spirit of inquiry at work in the service of man's far-reaching hopes of a better world and a nobler life. But we shall see more of this attitude of science in the following section.

CHAPTER XXXIII

THE EFFORTS OF SCIENCE TO SOLVE THE PROBLEM OF EDUCATION

THE theory of evolution came to science from the field of the biological sciences. It was first a suggested explanation of the origin of species and their interrelationships; and afterwards it was a theory of the origin of living forms, including the descent of man from that hypothetical origin. Now the work of the scientists in their laboratories, or in their long explorations about the world, had been rather far removed from the work of the philosophers and psychologists in their more quiet studies. Darwin, however, saw rather clearly that this new theory was certain to affect in profound ways the old attitudes of both the philosophers and the psychologists. Of course practically all the philosophical interests that were in any way under the dominance of religious motives opposed the new theory. Not alone from the religionists, however, did this opposition come; the traditional scientists stood firm against the new doctrines. It was a crucial time in the history of science, as well as in the history of humanity. It involved new leaderships in science, and old leaders always protest against the new in any field. It involved the making over of all the ranges of human knowledge, and that always seems like an impossible task. Besides, it seemed as if humanity were asked to cross a great fixed gulf which would cut off all communication with the past and with all those values in defense of which both religion and the older science had been engaged.

The New Psychology.—Nowhere did this great gulf seem more complete or more fateful than in the field of psychology. The doctrines of the older psychology, reaching from Aristotle to Kant, had gathered around Psyche, the soul. This Psyche was somewhat of a stranger on the earth, undergoing experiences, learning, and discipline. On the educational side it was implicitly held that learning is a process of taking on materials, and hence the continued emphasis upon some form of materialism; also in this process memory plays a most important part, since it is the storehouse of these materials. Toward the latter part of this period, not many decades before the theory of evolution arrived, the doctrines of intellectualism became particularly insistent. Hamilton, the Scotch philosopher, had declared, "Man is not an organism; he is an intelligence served by organs." It is true that, over against this intellectualism of the enlightenment, the newer thought, initiated by Rousseau, had suggested that mind develops by processes analogous to growth,—that is, by inner processes, rather than by those external processes of taking on materials. The psychology that was implicit in the new doctrines of evolution was to be much more closely related to this doctrine of growth than to the older intellectualism. And Darwin, both in his "Descent of Man" and in his "Expression of Emotions in Animals and Man," shows that he feels this closer relationship to the later type of thought. Spencer, also, feels something of the same kinship. But on the whole, the task of reinterpreting the standpoint of psychology and the working over of the materials of the older analysis into the new is too big for one generation. Psychology is written in much the old strain for decades after the publication of Darwin's work, and it is not, indeed, until the publication of the larger work of James, in the last decade of the nineteenth century, that the real bearing of

the evolutionary theory upon the organization of psychology becomes evident. What of the meantime? Well, Spencer states the case with characteristic fullness and naïveté. He says in his "Education," "Though it is not possible for a scheme of culture to be perfected either in matter or form until a rational psychology has been established, it is possible with the aid of certain guiding principles to make empirical approximations toward a perfect scheme." That is to say, in the absence of a rational psychology he will fall back upon the maxims of common practice, which are for him partly Pestalozzian, partly of the folkways.

Now, as Spencer points out elsewhere in the same discussion, a satisfactory organization of the *materials* of education into the form of a curriculum will remain impossible until we do get some actual knowledge of psychology, until "we ascertain with some completeness how the faculties unfold." That does not now exist; hence his choice of materials for the curriculum must be made without such help, and, as is certain to be the case, he really falls back upon traditional conceptions much more completely than he is aware.

The Rise of the Sciences.—There is no more wonderful story in human history than that which tells the tale of the rise of science. We have already seen something of this, but the whole story is far too long to be further touched upon here. But we must note a few elements in that other aspect of the same story—how the sciences made their way into the schools. At the beginning of the nineteenth century the old traditional materials still remained in control of the schools, despite the many reform movements that had taken place, with the exception of a few scattering experiments which were generally regarded with some suspicion. But during the course of the nineteenth century a great change was forced upon the schools. New subjects in the

sciences were rapidly developing, and these were demanding and securing admittance. New materials were rolling in upon the world from the simple laboratories of obscure workers in the fields of physics, chemistry, geology, botany, and zoölogy; from the more striking work of men like Franklin and Faraday in electricity, Watt and Stephenson in the control of steam, Hugh Miller in the observation of the structure of the earth, Linnæus, Cuvier, Buffon, Lamarck and Darwin in plant and animal life, and from many other sources,—a brilliant story of remarkable achievements.

But these materials were not in the schools. The older materials of language and grammar looked with scorn upon these new, chaotic, unorganized masses of information. A real campaign would be needed to break through those old bulwarks of tradition and carry these new materials into the schools, and thus into the life of the people. To be sure, these scientific materials had been used in some measure in common life and practical ways, but this did not carry with it recognition of their value for educational purposes. The full meaning of science for the life of the world would not be realized until all the common life was brought into beneficent contact with its promised values; and this could only be accomplished by making these materials an integral and fully accepted part of the curriculum of the schools. The brunt of this battle for the recognition of the sciences was borne by two Englishmen, Spencer and Huxley. We must glance briefly at the work of each.

The Work of Spencer.—Herbert Spencer (1820–1903) was the first famous advocate of the sciences in their modern form as educational materials. His essay "What Knowledge Is of Most Worth?" may be said to have ushered in the period of agitation for a place for the sciences in the schools. In this discussion Spencer vigorously attacks the

traditional curriculum, almost bitterly condemns the conventional academic subjects, and urges upon all educational agencies the claims of the sciences to be that knowledge of most worth. He insists that the sciences are valuable for the practical guidance of life and for the discipline of the mind. Spencer was acquainted at second hand with the work of Pestalozzi, and he follows the lead of that reformer in some measure. He advocates a rational system of physical education and a natural system of moral education, in which the punishment should fit the crime; and he would displace the old practices of arbitrary punishments in the school-room by substituting the Pestalozzian doctrines of interest and activity.

Spencer classifies educations, according to their worth for life, into five main groups, as follows: "That education which prepares for direct self-preservation; that which prepares for indirect self-preservation; that which prepares for parenthood; that which prepares for citizenship; and that which prepares for the miscellaneous refinements of life." In the defense of these materials Spencer argues with fundamental and convincing conviction. His arguments are, for the most part, unanswerable. But there were two aspects of the situation that he did not fully perceive. First, arguments do not make much headway against the established routines of social life or conventional institutionalisms. The traditional subjects were *in,* and possession is more than nine points in an argument. The traditional school-men seemed rather to enjoy the eloquence of the advocates of science; but they did not propose to give up any of their ancient privileges. But the second of these elements was perhaps more decisive. Spencer was himself, in very large measure, a *traditionalist,* except that he wanted a different, and doubtless more valuable sort of material to become the central factor of the tradition. This

is seen in the fact that he was willing, as we have already noted, to accept "guiding principles," upon which an "empirical approximation toward a perfect scheme" of education could be built, in place of psychology. The latter was then non-existent. But this traditionalism of his point of view is more particularly seen in the almost vindictive hopefulness with which he closes his essay on "Which Knowledge Is of Most Worth?" After pointing out, truthfully enough, that the sciences and the scientists of his time had been harshly and unfairly treated, he expresses the hope that a better day will come; and he closes by saying:

> Paraphrasing an Eastern fable, we may say that in the family of knowledges, Science is the household drudge, who, in obscurity, hides unrecognized perfections. To her has been committed all the work; by her skill, intelligence, and devotion have all the conveniences and gratifications been obtained; and while ceaselessly occupied ministering to the rest, she has been kept in the background, that her haughty sisters might flaunt their fripperies in the eyes of the world. The parallel holds yet further. For we are fast coming to the *dénouement,* when the positions will be changed; and while these haughty sisters sink into merited neglect, Science, proclaimed as highest alike in worth and beauty, will reign supreme.

This doctrine was, of course, a little more than the traditional school-men or the general public cared to accept.

The Work of Huxley.—Thomas H. Huxley (1825–1895) was the second, and the greater, of the two advocates of the sciences as educational material. His arguments repeat all those of the scientists from Bacon to Spencer. He insists that education must have a practical purpose—it must enable men to live. It must have a basis in reality, rather than in the verbalisms of the books, thus echoing the sense-realists of the seventeenth century. And he declares that

if practical usefulness and reality are made the basis of choice of materials, the sciences will head the list of subjects in the curriculum. He asks "Is it too much to say that an education which should embrace these subjects [*i. e.* the sciences] would be a real, though an incomplete, education; while an education which omits them is really not an education at all, but a more or less useful course of intellectual gymnastics?" This question is, of course, directed against the prevailing classicism of the early nineteenth century in England. Huxley's comparison of the verbalisms of this linguistic education with a course made out on possibly similar lines in the sciences is quite convincing in a negative way.

On the positive side Huxley writes with an eloquence that is masterful. His definition of a liberal education, set forth in his essay "A Liberal Education and Where to Find It," should be known by every teacher. As a statement of an educational ideal it has lasting significance. Of course, like many another educational ideal, his statement is difficult to translate into the method of educational practice. Huxley, indeed, shows little appreciation of the inclusive educational problem. He would have every one acquainted with these wonderful results of the progress of the sciences, for there is no other knowledge that has such intimate and universal relationship to all the various activities and concerns of living. But on the whole he would merely *have them acquainted,*—a sort of "Be ye acquainted!" proposal. His psychology is of the same general order with that of the sense-realists of the seventeenth century. He seems to assume that the whole problem in education is that of selecting the proper sort of educational *material.* His contributions to educational discussion are eloquent and valuable, but they do not help much in the analysis and solution of the problem.

The Defense of Science.—The work of the great scientists in the furtherance of human knowledge can scarcely be overestimated. But it is not too much to say that in the main the work of modern science goes on in ignorance of the value of psychology. Many of the positions of the scientists are therefore impossible. Sometimes efforts have been made to ridicule psychology out of court, or out of use as a tool of educational procedure, just as certain naïve healing cults have attempted to ridicule physiology out of existence, or out of use as a tool of hygiene. The tragedy lies in the fact that in so large a measure the various departments of science are isolated from each other in their own laboratories, technics, and routines. Modern science has stood for investigation, for scientific method, for the laboratory method, and the like, and also for the building up of great systems of knowledge; and at times modern science has stood for the search for truth (what the Germans call *Wissenschaft*) in every phase of the word. But that has been only when rare individuals have been pleading the cause of science as the search for truth, and when they have been leading in its defense. Thus Huxley performed valiant service in the defense of science in the days when the Darwinian theory was on trial. The cause of science as the endless search for truth was bravely defended by many able men in the nineteenth century, when the frontiers of science were in the biological fields, just as in earlier ages other strong men had fought for the same right to search in the fields of astronomy or physics.

But the frontiers of science have now passed over into the fields of the social sciences—economics, politics, and education. And in rather deplorable measure the workers in the older and more established fields of the sciences have lost interest in the problem of *science,* having become overbusy with their work in the fairly free fields of investiga-

tion. Hence the task of defending the frontiers of science has been largely left to the workers in the fields of the social sciences themselves, to whom, however, the right to call themselves *scientists* is rather grudgingly given. This defense of science is, of course, the greatest problem of the modern world. It is much more important, indeed, than the question as to whether certain scientific materials shall be included in the school curriculum. And this task of defending science is many-sided. It involves the fight, as of old, against the still unconquered forces of ignorance and prejudice and old falsehood. It must contend with the false conceptions engendered in many by the overzealous efforts on the part of young and enthusiastic men to destroy all human ideals in the process of destroying old falsehoods. And it must fight the complacencies and self-satisfactions of the established sciences,—those which have developed vested interests in the intellectual field, which have adapted their tasks to certain fixed boundaries, and which, through ignorance of the history of science and of psychology, have developed a scientific method which is fully settled and unquestionable.

Scientific Method in Education.—When reference is made to scientific method, it is generally assumed that just one such method is possible. That is, of course, a very inadequate conception, at least in the field of educational discussion. The term "scientific method" is usually employed to denote the method used by an advanced investigator on the more or less remote frontiers of science,—a man who is actually making new and fresh contributions to human knowledge.

But from the standpoint of educational theory there are at least three distinct scientific methods, each with its own objective, its own technic, and its own criteria of success, and each based on distinctive psychological conditions.

Failure to distinguish these three types is responsible for much of the futility of contemporary educational discussion, especially by representatives of the scientific point of view; and this failure tends to turn all the advocates of the sciences into materialists of the seventeenth century type. Let us note these three types of method.

First, there is, of course, the ordinary scientific method, which is supposed to be the method of the advance worker in his actual search for new truth, the original investigator who is dealing with materials which are new to himself and to the world. The aim, the technic, and the criteria of success are all distinctive, and they are determined by the actual nature of the task.

Second, there is the scientific method appropriate to the younger *student,* who is going over materials which are new and strange to himself, but which have been formulated in more or less logical completeness by the investigators who have gone before. Here, it must be obvious, a new sort of aim enters. There are new criteria of success and failure, and there must be a very different technic of accomplishment. The first type of method, sketched above, is obviously out of place here; but the lack of any other adequate sort induces the student to attempt to cover in a few hours what may have been the task of many lifetimes of earlier pioneers on the frontiers of science. Not infrequently mere learning, or mere memorizing, takes the place of real scientific method; and the result is, not unreasonably, that science ceases to be a worthy or engaging pursuit.

The third type of scientific method is that needed by the *teacher,* i.e., one who is going over old materials for the second, tenth, or twentieth time. Here, again, all the aims are different, the technic is different, and the criteria of success and failure are different. The scientific world is a constructed world, a thought-out world, not either a

memorized or an obvious world. But it has taken centuries to think out and construct this world of scientific achievement. No child can take the time to rethink the world in any such fashion. On the other hand, memorizing books is the death of science. How shall the teacher make sure that the child *thinks* his way through the accomplishments of the thousand years of science in the few years of educational experience? That question sets the task of the third type of scientific method.

But in large measure these three types of actual mental activity are naïvely confused in the discussion of scientific method in education, with the result that all the issues in education are confused. Usually this means that practical men fall back upon some sort of *material* as the solution of their troubles. Of course any successful scientist must be a successful practitioner of the first type of method, though, unless he is also something of a psychologist, he is likely to be but a poor expositor of that method in argument. Most students fail to develop the second type without actual aid of some sort, and that help is not always available. And while it is true that no amount of study of method can transform a dolt into a genius, it is also true that effectiveness of skill in working in the field of education can be enlarged by definite attention to these three forms of scientific method. Even the most brilliant natural-born teacher may be helped by some real study in this field.

Freedom through Science.—One final item should be noted. It is the claim of the scientist that human freedom is to be accomplished by the rigorous application of the sciences to human living. There is large hope in this. But if this hope is to be realized, at least *two* aspects of the problem must receive conscious, explicit recognition. The first is this: the term "science" must be freed in its own right from any narrow and petty application to any restricted

subject-matter. Science must be recognized as a possible mode of approach in every aspect of human living, social as well as physical. And that means that the identification of scientific method with laboratory method is unwarranted. The essentials of scientific method seem to be, first, *hypothetical* thinking as opposed to old *dogmatic* thinking, and second, the testing of hypotheses, instead of accepting them on the basis of their reasonableness. And that testing may come in many ways.

The second aspect of the problem of freedom through science is this: that science must not be identified with accumulated knowledge, i.e., with certain accepted materials. There is a scholasticism in modern science not less dangerous than the scholasticism of the Middle Ages. It grows out of the same soil; humanity clings to its old habits quite as tenaciously now as ever in the past. And the accomplishments of the scientist in his laboratory become quite as dear to his heart as the accomplishments of the scholastic in his closet. The test of the scientist is his love of the search, not his list of accomplished results.

Scientific procedure has everything to give to the schools of a democracy; but when the sciences offer the schools merely the accomplished, material results of old research, it is as if the schools should be given not the bread of life they need, but the cold stones of conventional information that they cannot understand, assimilate, or appreciate. Science needs to make lasting compact with psychology, in order that the vital spirit of the search for truth may become an integral part of the program of the schools.

The very existence of a democracy seems to depend on such a development. This, finally, may be seen from another point of view. Democracy needs discipline quite as much as does any other order of society; but it must be the discipline of a *free* intelligence, not of a conventional social

status. How shall discipline and free intelligence be developed in the same individual? Ever since the days of Locke at least, the world has rightly insisted that there can be no real education without such an actual discipline of the powers of the mind as shall make the mind a fit instrument for the uses of life. It was the boast of the older linguistic and mathematical studies that they alone were sufficiently definite in *form* to secure this disciplining of the mind, for discipline was regarded wholly as a matter of *form*. This older conception seemed to consider discipline as a sort of holding the unstable mind in a fixed form until its instability had given place to a consistent and stable character. "We learn to think by reading the perfectly expressed thoughts of the world's great thinkers, until our minds are definitely molded on the lines of their perfection of form." From this point of view the sciences have little value as educative materials, for the very concept of science indicates something that is forever mobile.

But this conception of discipline seems too artificial, too external, too unreal. Psychologically, it is no longer tenable. We do not learn to think in such fashion. Such external discipline does not meet the needs of a scientific age, and it utterly fails to grasp the significance of discipline in a democracy. Science demands free intelligence; democracy demands free personality; and such a conception of discipline ignores the psychology of both free intelligence and free personality. On the other hand, the scientists have never faced the question of basing discipline on less formal and more vital grounds, grounds more in consonance with the spirit of science. Yet the real answer to the problem lies in the field of science. Discipline of the democratic sort does not come from externally imposed tasks or from imitation; all discipline is, in the end, *self*-discipline. All true discipline is of the nature of that training which comes to

the scientist who has put himself under control for the sake of some worthy goal which he himself has apprehended. From this point of view the educational process becomes wholly an inner process, not subjective in the invidious sense of that word, but "within experience," all external aims and all merely externally presented materials being eliminated. The educational process becomes one of continuous growth of experience, continuous interaction of mind with fact, continuous reconstruction of experience, continuous development of control, and continuous discipline.

But owing to the dominance of *materials*, this discipline into freedom does not usually take place. The sciences have not attracted students as they should have done, because a certain scientific *materialism* (in the educational sense) stands in the way of both discipline and freedom.

CHAPTER XXXIV

THE DEMOCRATIC MOVEMENT IN EDUCATION

The third stream of influence flowing from the work of the naturalists of the eighteenth century was predominantly social. Not infrequently the educational ideal has become consciously social, for example, in the doctrines of Montaigne; and always, back of the most intellectual ideal, some more or less shadowy form of a social world can be seen, as, for example, in the "Heavenly Fatherland," the "Patria," of Thomas Aquinas. Scholasticism, even though working at intellectual tasks, felt itself furthering the interests of a social sphere, even though in another world. Classical humanism, tied up in the grammar schools and newer colleges of the early modern period, was working for the development of a real humanity. And the rising interest in elementary education in the last two centuries has grown out of, and back into, the modern world of commerce, industry, and democratic realization.[1] Of course all education everywhere, from the primitive folkway life down to the present, has been determined by some sort of a social ideal, unless, perhaps, some element of lingering tradition remains to make the system no longer intelligible to the new age. It *must* be true that all education is preparation for some sort of living in some sort of a social world.

The Democratic Ideal in Education.—But never before in history has the task of education been so seriously considered as in the past century under the more complete realization of the meaning of all the revolutionary move-

[1] Dewey and Tufts, "Ethics," p. 165.

ments of the modern world. Religious revolution, from the Reformation down to the present, shows clearly that human life is moving on toward an ideal of freedom from the arbitrary dogmas and authorities of the past. Political revolution brings home to men continuously the fact that there is no halting-place short of the life of reason. Industrial changes are demonstrating that old distinctions between the educated and uneducated classes can no longer be maintained along economic lines. And the intellectual revolution is simply gathering up, organizing, generalizing, and applying these great realizations to the ever-widening spheres of living. Education must turn them all to the uses of living and the preparation for more intelligent living. The task of education becomes inclusive. The ideal of education under these conditions of freed emotion, intelligence, and action is really *human* in a sense never dreamed by the Humanists. Economically, men must be free to work, to enjoy, and to share the values and meanings of life in a human way. Very well; let education take account of this aspect of the task. Politically, men must be free to deliberate, to know, to decide, to choose, and thus to help determine their own destinies and the destinies of one another in a human way. Very well; let education take account of this fact. Religiously, men must be free to worship or to refuse to worship, to "reverence their conscience as their king" in a human sort of way. Very well; let education understand this fact. And *intelligence* must become big enough to comprehend these freedoms which the soul of the race is determined upon. The ideal of education in a democracy must be inclusive enough to maintain an actual aim of freedom, while at the same time making use of all the materials of the past and all the achievements of the present to realize and criticize and make effective that aim of freedom.

The Machinery of the Democratic Ideal.—Older ideals of education found their machinery in the traditional institutions of the community, especially the church. In large measure, schools have been handmaidens of the religious hopes of the race. To be sure, the governmental institutions have usually promoted educational enterprises of a more or less limited sort. But any sort of education less than a completely democratic type must find much of its support in special classes or groups. But with the coming of the free period in political life, and with the demand for the common education of the community, education has become more and more the necessity of all persons; and therefore it has become the task and responsibility of all persons, working through the state. The modern democratic program is a program of state promotion of public education. The state is the organized instrument for collective action, and education is the most thoroughgoing example of collective action. The state is therefore its proper instrument. Pestalozzi saw this. Headway in handling the destinies of the poor and ignorant depends upon making that problem a public responsibility. Horace Mann saw it, and decided that a school-house must be built within the reach of every boy and girl, without regard to economic considerations. Increasingly the modern world has seen it, and laws have been passed making it compulsory for every child, within certain age-limits, to attend some sort of school. The task that proves too great for individual initiative or for private philanthropy becomes surprisingly simple when made a distinctive part of the public will through governmental action. The perpetuity of the state, the stability of institutions, the conduct of affairs—all depend upon intelligence, or so it is assumed, and in this sense "the public school is the hope of the country." Life, itself, becomes the criterion of progress in educational matters. In a sense this is a return

upon the implicit ideal of the primitive folkways. But of course it is much more sophisticated, much more elaborate and intelligent. Also not infrequently the results achieved are accepted by the public with quite the same complacency as was characteristic of the primitive folkways. Democracy has not yet learned how to build educational institutions with the patient insight and the sympathetic intelligence capable of interpreting to the growing child the motives of freedom that have been the most earnest desire of the modern age, so that those motives become his own. The wish to be democratic is with us more or less; the ideals of democracy become clearer from decade to decade; but the actual will-to-be-democratic is not yet present, and especially the actual *method* of democracy in education, that is, of democracy in the experience of children, is not yet clear. Accordingly, we have only partially realized our democratic professions. Present world-conflicts press home upon us the larger nature of the task. But certainly, if the world is to be "made safe for democracy," the work must begin in the schools. However, there is as yet little agreement as to just what a completely democratic or social program in education would include. A "school-house within reach of every child" has not solved the problem; compulsory attendance has not been able to overcome the difficulty. What shall be the nature of our program? What shall be the aim? We must note the characteristics of a number of answers that have been proposed for meeting this question.

Education as Universal Intelligence.—The social emphasis upon education has become more pronounced in the century since, and following upon, the work of Pestalozzi and others who looked at education from his point of view. In a fashion education has become quite aware of its social significance. For example, an American statesman, Mr. Garfield, suggested, "We must offset the dangers of univer-

sal suffrage by means of universal education." Out of this conception, which is based partly on hope and partly on fear, there has arisen the ideal that education should mean, primarily, universal dissemination of knowledge, since knowledge is both safeguard of past accomplishment and guarantor of future progress. This is further emphasized by the fact that there is a growing wealth of vital and useful knowledge in the world, though not all the world realizes this fact and hence we have stagnation or slight progress, where we should be having constant progress. Most people know far less than they are able to know, and just to that extent human progress is delayed or defeated. Education thus becomes a public function; it should be controlled by the state, in order that every individual may fully share in it and in order that the knowledge so disseminated may be public knowledge and not private, interested knowledge. In his "Dynamic Sociology" Ward defines this educational ideal and describes the system necessary to its realization as "a system for extending to all members of society such of the extant knowledge of the world as may be deemed most important."

It were well for the student to realize that Ward's conception contains some essentially Platonic elements. It urges the control of all information by the state, and the dissemination of such parts of it as may be deemed to be most important. These are almost the identical proposals of Plato. It should also be noted that this is wholly an informational conception of education, and as such it is not far removed from the doctrines of Montaigne. That is to say, it does not rise to the level of recognition of the psychological factors involved in educative processes, but simply assumes that information may be taken on by any one. It illustrates how lacking much sociological theorizing has been in psychological insight. Up to within the last

decade there has existed no social psychology able to give sociological theory its proper tool of psychological analysis. The effort to state social necessities or social theories in terms of traditional, non-social psychologies has proved absolutely futile. The greatest need of the present, from the standpoint of a sociological theory of education, is the development of a thoroughly effective social psychology. Until that appears, sociological theorizing is likely to prove pedantic and scholastic, especially as concerns educational processes.

Education as the Development of a Social Mind.—Within the last two decades there has been some development of such a social psychology in a general and gross sort of way. One result of this development has been the working out of the theory that there exists what may properly be called a social mind, which is something other than the sum of individual minds, which is prior, indeed, to the existence of individual minds. This assertion, of course, is challenged on every hand. But there seems good ground for such a theory. Professor Cooley has formulated the doctrine in this way: "Every thought that we have is linked with the thought of our ancestors and associates, and through them with society at large. [This] is the only view consistent with the general standpoint of modern science, which admits nothing isolated in nature."[1] Such a statement brings us a hint from the folkway world, where what he describes was certainly true, and it helps us to see how deeply and unconsciously the great cultures and institutionalisms of the past underlie all our living and thinking. But this statement also brings us a curious denial of one of the original proposals of Rousseau. In his earlier writings, and, indeed, all the way through his work, Rousseau harps upon the failure of society, and especially upon

[1] Cooley, "Social Organizations, pp. 3–4.

the evils of traditions and institutions. He would escape from all this past accumulation of evils and find freedom and the chance for a fresh start in a life developed apart from the world and from all contact with ancestors and conventional associates. He assumes that society began in some such atomistic way, i.e., by the coming together of hitherto independent individuals who agree to live together in a social group.

Rousseau's lack of psychological insight appears plainly here. Psychology is now showing us that individual experience is really deeply rooted in the accumulated experience of the race. Individual habit grows up under the tutelage of social habit; the folkways are endlessly present and effective even to-day. "Education comes not from the books; it is borne on the currents of the folkways." The great social mind of all the past with all its traditions, attitudes, prejudices, hatreds, tolerances, and faiths, imposes itself upon us. Rousseau tried to find a way of escape from this; he would run away from it all to the freedom of nature. But the fate of "Emile" shows how impossible such an escape is. The only possible escape from it is in facing it, tearing it to pieces, analyzing it, grappling with its evils, accepting and enriching its goods, and using it in the making of a world in which our chastened energies and purposes can dwell. Certainly there can be no more lamentable failure than in running away, unless it be found in the credulous acceptance of all the content of this social mind, for that would be the full surrender to all the elements of custom, the denial of intelligence, and a return to the primitive folkways.

Education as Social Control.—Another of these sociological ideals of education defines the function of education as the "chief means of social control." This is a great advance upon some old conceptions of social control—control

by the authority of some arbitrary or supernatural power expressed through king, soldier, policeman, or priest. Knowledge is to take the place of all these, except, of course, in the case of certain abnormal types who must still be controlled arbitrarily. But here again there seems to be a falling short of complete recognition of full democracy. There will be authorized leaders whose business it will be to determine just what directions this control shall take. Humanity, even democratic humanity, is not ready to take authority unto itself and accept the responsibility of determining its own destiny by means of its own intelligence. This was the implicit proposal, it will be recalled, of Socrates to the Greek world. Such a proposal, impossible in the days of Socrates, might be possible now, if all intelligent men were willing to play the game in that way, for the high hopes of an intelligent democracy. Now and then we seem ready to commit ourselves to such a program. It is the ideal of science and of democracy; it is implicit in all the revolutions of the modern world; it is the only logical stopping-place for all those who are in sympathy with the revolt from medievalism. But we are not yet quite brave enough for it. Meanwhile we linger under a sort of hybrid social control, supposedly democratic and intelligent, but largely determined by old folkway attitudes inherited from the Middle Ages or more remote times.

Education as the Human Interpretation of the Evolutionary Process.—The evolutionary process is usually stated in terms of a struggle for existence, although such a statement is not by any means conclusive or inclusive. On the lower levels, however, struggle seems to be a more or less constant factor; and in that struggle a certain type of fittest is selected for survival. Such an outcome seems, however, to be very distinctly wanting in ethical quality. Educational processes find their place in the evolutionary

movement by stating the process in slightly different fashion. The selection of individuals for survival is to be on other grounds than the fittest in the lower sense. Social selection, moral selection, intelligent selection—these are to take the place of natural selection. Rather, selection is to go farther still; the task of education is to be that of fitting as many as possible for survival. This is to be accomplished in two main ways. First, by means of the application of eugenic principles a better general level of the race is to be attained. Second, by means of a more natural education a larger realization of possible individual contribution to the sum total of human living is to be assured. Education is to be consciously utilized in this way for the elimination of social evils and the prevention of social waste, by starting the young along lines of social development which do not lead to the traditional ills. This is scientifically possible (involving evolutionary science) and democratically desirable (saving as many as possible for the life of freedom in society).

The Ultimate Problem of Democratic Education.—We have here set forth several worthy aims or interpretations of education which have developed under the growth of the modern social and democratic movement. "Universal intelligence," "gradual development of a social mind," "instrument of social control," "highest term in the evolutionary process,"—each of these is distinctly a valuable offering to the understanding of the educational problem in a democracy under modern scientific development. But the fact is that *they do not work out democratically.* Universal intelligence becomes a program of cramming and stuffing materials; gradual development of a social mind becomes accommodation to some present sectarian partisanship, or an acceptance of such a conception of the status quo as to make all progress impossible; the instrument of social control be-

comes the right of special interests—economic, religious, political, or some other—to criticize all programs of education and to decide what materials shall be taught and what withheld, what activities shall be allowed and what permitted; and that highest term in the evolutionary process becomes identified with some local, racial, or national *Kultur* as an expression of the absolute, and evolution comes to an end before its term.

The ultimate problem of education in a democracy is not found in securing the statement of ideals or materials. These we have in great abundance, yet we do not have a democratic education. That final problem lies in the general field of *method,* that is to say, in the field of understanding of the processes of experience. Democracy is something far more than a vague ideal; certainly it is not an ideal that will realize itself. And certainly democracy is not a *material* at all; there are no materials that are *essentially* democratic and that under all circumstances can be depended upon to produce a democratic outcome. Democracy is an attitude of mind, a keen sense of a particular type of human relationships, a willingness to face realities in a peculiar way, a breaking down of certain types of old artificial barriers, and an opening of the whole world of humanity to new freedoms of personal participation in the goods of the world and to new resources of social contact. Education for this sort of living demands knowledge, of course; but it demands more than knowledge. It demands a sense of direction; it demands a method. This method will be primarily psychological, of course; but it will be constructed out of a psychology that is thoroughly democratic and social, as much so as is the aim that it seeks to realize. We have these modern aims, and we have much modern material worthily able to nourish our democratic moods; but we retain in our educational practice the same

old methods almost completely. Our school administrations, at least, our administrative attitudes, are still largely autocratic. Our class-room teaching is still largely traditional. The curriculum is handed down to our teachers in a purely Platonic fashion, our teachers teach materials they do not understand, and our pupils take on materials out of this "preëxistent treasure-house" of books and libraries. We are *molding* our children to old forms of thinking, to old absurd obediences, to old customs and traditions, to the type of a world that exists nowhere any longer, except in pedantic text-books and in the mind of a thoroughly institutionalized teacher. This is not democratic. There is no hope for democracy in such a program. Yet our political institutions are professedly democratic, and we say that we live in a democracy. "No amount of our ordinary type of education will develop personal self-control and the habit of responsibility." And democracy *is* just those two things —personal self-direction in an intelligent, responsible social way.

Now our chief difficulty in the development of such an education arises from the fact that we do not see that it involves the development of the same essential attitudes and practices in the community life. We shall never get a *democratic* product from our schools as long as our community life as a whole remains essentially *traditional,* if for no other reason than that the graduates of such an education would find themselves outside the community life because their education would *unfit* them to live in society. But there is another reason why such an outcome is impossible: school education is not, even now, as effective as the education of the life outside of school. No, all the phases and institutions of our social living must be made democratic, if our education is to become such—our economics, our industries, our civics and our ward politics, our ethics

and our community moralities, and our conceptions and our practices. Education is not apart from life; it is just the adult generation giving its own world to the new generation. And be sure the adult generation will not give a very different world from that in which itself lives. The adult generation cannot keep its own private evils, traditions, greeds, autocracies, shams, follies, and insincerities, and ask the school, working right in the midst of these effective influences, to produce a new generation committed to good, to science, to altruism, to democracy, to honesty, to wisdom, and to sincerity. The democratic problem in education is not primarily a problem of training children; it is the problem of *making a community* within which children cannot help growing up to be democratic, intelligent, disciplined to freedom, reverent of the goods of life, and eager to share in the tasks of the age. A school cannot produce this result; nothing but a community can do so.

CHAPTER XXXV

SOME CONCRETE RESULTS FROM HISTORY

THE last chapter closed with the statement "A school cannot produce these (democratic) results; nothing but a community can do so." Thus we see that we have come back to the folkways from which we set out. At least, we have come back to the *community*, where once the folkways reigned supreme and within which that thoroughly successful education of the primitive world was secured. We have made the round of the ages. We have seen the folkways dissolve in Athens and come to larger construction in the Europe of the Middle Ages; we have seen the great structure of habit and institution persist under the reconstructive movements of the ages. We now see that life *must* be lived in contact with, and against the background of, this great and persistent structure of tradition. To be cut off completely from that is to be, in deadly truth, a man without a country. But the community of to-day is not the primitive community with which we began. There have been great gains. "Socrates discovered free personality and moral freedom, and made the greatest of all epochs in the world's history." Primitive Christianity opened the way of escape for the individual from the larger suppressions of the imperialistic community, declaring (as interpreted in the Reformation) that the good man shall live by his own goodness, not by the second-hand goodness furnished by institutions, though institutions do offer the opportunity for the organization, development, and discipline of his own good-

ness. And the Teutonic barbarian brought in that "fresh blood and youthful mind" which against all the demands of mere institutional absolutism have stood firm for the realization of free intelligence, free personality, and a free world, thus bringing the ideals and developments of science and democracy to the modern world.

Over against these positive gains the institutional or folkway attitude has set up, age after age, new finalities of doctrine and of practice. We have seen this on the largest scale in medievalism. That is its most conspicuous achievement in world-organization. But never has there been an age that has not produced some special development of this desire for finality, some final *material* or some ultimate *theory*. The ages are strewn with the wrecks of old theories whose memories are still with us, indeed, whose *devotees* are still with us, as we shall see in a moment. For it has been the consistent tendency of all reforms to succeed too easily, that is, to accomplish some result and then to subside. But the reform has not been merged into the whole process of progress. Something of it remains—some creed, some touch of a strong personality, some scrap of old organization—and this sets itself up as an independent aim or end in itself. Soon custom, tradition, and sanctity gather round this attitude and it becomes part of the permanent habit of the world. This tendency is human; that is to say, it is found in all the various interests of our living—economic, political, moral, religious, and educational. History seems from one point of view but a long search for that final solution of all our problems, a magic element, like the "philosopher's stone" of the Middle Ages. How many times has this final solution been found! How frequently has it been grappled to the soul of an age, established in its beliefs, and depended upon as the last word in all human

striving! How often has humanity been disillusioned of these finalities! How often has it returned, undismayed, to the next that offered!

The net result appears in the fact that we are now the possessors of many of these solutions, each of which has largely turned out to be not a solution at all, but one more element in the problem that is to be solved. Its adherents prove to be not reformers, but obstructionists of a stubborn sort, unless the world consents to be saved after their own particular formula. Their logic turns back toward Aristotle, and their real task is not to solve problems at all, but to preserve their own dignity.

In this way we have come down to the present. It is an age filled with the shoutings of clamorous partisanship, with many schemes pressing for recognition, and each scheme is quite fully convinced that its own solution is the only genuine one. There is, of course, no lack of humor in the situation. One of the most vigorous of the partisan voices does not hesitate to declare, "The more I think about my own solution of this problem of education, the more convinced I am that it is the right one." We are primarily concerned with the present, and with what it means for the future. Hence, before we take leave of our subject, we must undertake a brief survey of these clamorous groups illustrating the character of the age. Perhaps such a survey will give us some clue to the larger nature of the problem. Let it not be unnoted that we are here seeking not a solution to a problem, but a more inclusive understanding and statement of the problem; and a very complicated part of this problem is found in the certainties of these educational parties that their solutions are correct. We shall look at a few of the many that exist.

The Classics Party in the Present.—As we have seen in

the course of this study, historic movements have produced lasting heritages of culture materials which have come down to us under the general estimate of classical. At times these have been ignored, sometimes because they were lost, sometimes because overfulsome eulogy had disillusioned the world of them. But over and over they have been gathered up and used to make life rich and full of the sense of the deep and poignant beauty of the world when it was young. Now somehow the race does not seem inclined to live on those high levels continuously; besides, occasionally there are other aspects of the world that seem to be worthy of genuine regard. The result seems to be that the classicists take this as a sort of personal affront, or as a deliberate effort to degrade the world from its liberal aspirations.

One writer says:

> Liberal training, once a distinction and an advantage, has been cheapened until it is held in contempt, unless in some way combined with the immediately practical. As in Mark Twain's story there were no gentlemen, because everyone was a gentleman, or claimed to be one, so there is now no intellectual aristocracy, because everyone is an intellectual aristocrat. . . . Like the church, which was inundated by the spiritually unfit in the time of Constantine and lost its high quality, intellectual life under democracy has become debased through taking to itself the whole world of the intellectually unfit. . . . Unable to bring every mountain low, democracy sticks its head in the sand-flats of its own creation and refuses to concede the existence of high ground at all. . . . There is bound to be liberal education somewhere. . . . The liberal arts, once sitting serene in the high citadels of aristocratic privilege, have descended and offered themselves to the common dwellers in the plain; if they are flouted we may look to see them return to their blessed heights and adopt their old-time attitude of reserve. Liberal culture will again be aris-

tocratized; the knowledge that is distinction, that is power, that is happiness, will once more hang beyond the reach of the common man,—and there we shall be again, with the same old problem of inalienable right on our hands.[1]

The Scientific Party in the Present.—Passing by the arguments of such propagandists as Huxley and Spencer, referred to and quoted in a previous chapter, we find much vigorous reasoning as to why the public attention and support should be accorded to science and scientific education. Professor Karl Pearson's "Grammar of Science" sets forth these arguments in effective summary thus:

The scope of science is to ascertain truth in every possible branch of knowledge. There is no sphere of inquiry which lies outside the legitimate field of science. To draw a distinction between the scientific and philosophical fields is obscurantism. . . . The scientific method is marked by the following features: (a) Careful and accurate classification of facts and observation of their correlation and sequence; (b) the discovery of scientific laws by aid of the creative imagination; (c) self-criticism and the final touch-stone of equal validity for all normally constituted minds. . . . The claims of science to our support depend on: (a) The efficient mental training it provides the citizen; (b) the light it brings to bear on many social problems; (c) the increased comfort it adds to practical life; (d) the permanent gratification it yields to the esthetic judgment.

Surely we might now be content to learn from the pages of history that only little by little, slowly, line upon line, man, by the aid of organized observation and careful reasoning can hope to reach knowledge of the truth, that science in the broadest sense of the word, is the sole gateway to a knowledge which can harmonize with our past as well as with our possible future experience. As Clifford puts it, "Scientific thought is not an

[1] Showerman, "The American Idea"; "School Review," Vol. XIX, pp. 159–60.

accompaniment or condition of human progress, but human progress itself." [1]

The Sociological Party in the Present.—Passing by the fact discussed in our general view of the democratic ideal of education that this doctrine may mean several very diverse things, we find that in general there is a more or less loosely bound group of partisans who insist upon the general doctrine of socializing education. Their attitude may be seen in the following quotation:

The school can contribute to the intelligence of its rising citizenship by drawing directly upon that large fund of present-day social, political, and economic knowledge that has made the low-priced magazine the tremendous power it has become in our national life in the last fifteen years. . . . The school should begin to teach the nature of the coöperative functions of society. For example, the pupils should learn in a simple way the functions of the policeman, the fireman, and the street-cleaner. They should understand that the streets belong to the people, and that they are loaned in part to transit companies, and to telegraph, telephone, lighting, and water companies. They should be made to see the public nature of these corporations. . . . All study of civics, history, and other forms of social science should clarify the pupil's understanding of the social forces and problems of his immediate environment. For example, civics, instead of studying governmental organization beginning with the constitution of the United States, should begin with community functions in District Number Ten, or the Nineteenth Ward. . . . The community functions of the neighborhood, village, ward, and city are concrete, simple, immediate, and personal . . . it is a simple step to the understanding of the great national questions that are claiming the serious thought of every patriot. The trusts, the bosses big and little, the control of legislation through caucus rule, and the influence upon the big leaders by the "interests," capital and labor, social legislation, lobbies legitimate and other-

[1] Op. cit., p. 37.

wise,—all of these and hundreds of other questions are vital to the civilization we are building. Our young people must understand this, because under a despotism the government may be better than the sum total of the citizenship, while under a democracy the government may be worse, but never can be better. This is the fundamental reason for our expensive school system.[1]

This sort of doctrine is especially prominent in educational discussion to-day. It has several variants, of which we shall examine one or two briefly. But on the whole it tends to emphasize the function of preparation for actual and intelligent participation in civic life. Hence it is not strange that the upholders of this doctrine should now be particularly insistent upon being heard.

The Moral Education Party and Its Platform.—The first variant of the sociological party to which attention may be called is the moral education group. This group is not internally unified; it has various divergent aspects and programs. But on the whole its plans may be fairly represented by the following:

Always and everywhere it is important that men should be good. To be a good man—it is more than half the fulfilment of life! Better to miss fame, wealth, learning, than to miss righteousness. And in America, too, we must demand not the mere trifle that men shall be good for their own sakes, but good in order that the life of the state may be preserved. A widespread righteousness in a republic is a matter of necessity. Where all rule all, each man who falls into evil courses infects his neighbor, corrupting the law and corrupting still more its enforcement. The question of manufacturing moral men in a democracy becomes, accordingly, urgent to a degree unknown in a country where but a few selected persons guide the state.

There is also special urgency at the present time. The ancient and accredited means of training youth in goodness are becoming, I will not say broken, but enfeebled and distrusted. . . . The

[1] Lewis: "Democracy's High School," pp. 6–8.

hurry of modern life has swept away many uplifting intimacies. . . . It is no wonder, then, that in such a moral crisis the community turns to that agency whose power is already felt beneficently in a multitude of other directions—the school. The cry comes to us teachers, "We established you at first to make our children wiser; we want you now for a profounder service. Can you not unite moral with intellectual culture?" [1]

The Program of the Vocational Party.—This is the second variant of the sociological program. It takes two turns, one in the direction of vocational guidance, and the other in the direction of vocational education, properly so called. The program of the latter is again complicated by being confused with industrial education of many sorts, and the whole problem of vocational guidance is still rather obscurely hidden in psychology. But something of the common problem of the two aspects of this program appears in the following statement:

In the shifting currents of social progress some institutions once powerful are left weakened, if not helpless, while other institutions wax strong to meet the demands of the time. The homes of the urban industrial classes have not the moral influence over children exercised by the family life of the farmer; the church grips fewer members with its theological doctrines than it did a century ago; the trades do less for their apprentices in the modern factory than they did when lodged in households; the press has more influence; libraries are more plentiful; and the school has grown to be a modern giant where once it was a puny babe. The same old institutional forces beat upon the nervous systems of men, but the relative distribution of their work has changed, and is changing. . . .

Just now the shifting of vocational education from the field of industry to the school is the crucial problem of our school organization. The schoolmaster is confronted with the task of dealing with a problem alien to his experiences and contrary to his tra-

[1] Palmer, "Ethical and Moral Instruction in Schools," pp. 2–5.

ditions. . . . The schoolmaster must grope for his solutions in the few established facts of his new case and build new methods, which will often be radical departures from all that his conservative mind has known and revered in scholastic standards. In accepting responsibility for the vocational training of American children, the school plunges itself into a period of transition in which old ideals are futile and new ideals are but half-discovered. Clear thinking, the great need of the moment, is obscured by the controversies that inevitably arise when two sets of traditions, born of two separate institutions, are suddenly thrust together in a conflict which dulls tolerance, increases vehemence, and destroys poise.[1]

These last words are applicable to the whole present situation, in which, however, not merely two sets of traditions are in conflict, but many sets, each claiming more or less a sort of "apostolic succession" in the educational fulfilment of promise.

Some More Specialized Parties.—We should be prolonging this discussion unduly if we should set forth at the same length all other parties to the general educational discussion of to-day. But there are certain specialized groups of interested people, each with some rather definite part, or fragment, of a program, whom we must not omit from this list. Many of these are particularly emphatic in their efforts to attract public attention, but all of them have some real contribution to make to the general discussion; and what they have to offer must be considered as we come toward the working out of that more complete and adequate program which is to take the place of these discordant efforts in the education of the future democracy. We must note the work and the program of the kindergartners, with the additional reinforcement that this aspect of education has received in recent years through the work of Montessori and her followers. The religious edu-

[1] Snedden, "The Problem of Vocational Education," Introduction.

cation group must be mentioned, with their program "to inspire the educational forces of our country with the religious ideal, to inspire the religious forces of our country with the educational ideal, and to keep before the public mind the ideal of religious education and the sense of its need and value." We must also note the industrialists, most of whom are employers of labor who seem to want to make sure that the labor supply shall be neither curtailed nor be permitted to grow up too ignorant to be of service in industry; the sex hygienists, who feel that they are facing the "problem of the twentieth century"; and the social center party, with its broad doctrine that the "social center movement is buttressing the foundations of democracy." These, and others which might be enumerated, help to swell the output of written and spoken discussion that almost overwhelms us to-day.

If we now add to these more important and minor parties those other partisans of habit and silence, the traditionalists, who "don't know what all this argument is about" and who are largely content to have anything go on in the school, just so long as the schools themselves go on, we shall have a fairly complete picture of the present situation. The world is full of parties, each with its more or less specific cure for the evils of the age. Some of these parties recognize the partial character of their programs and are ready to coöperate with any and all who are seriously working for the more adequate program. But many are immersed in their own importance and have no thought of any coöperation.

The Defect of this Partisanship.—The chief basis of this partisanship is at the same time its real defect. Of course this is not unusual. Most partisanships are thus based upon defects of analysis. Almost without exception the parties enumerated above stand upon some chosen

material of education; they advocate some particularly valuable type of knowledge or subject matter. This is truer of the larger historic parties than of the more specialized modern ones. The majority of these latter are attempting to cure some specific evil in the common life, and they are addressing themselves to some functional aspects of the social situation, having only a secondary interest in their particular materials. But on the whole the major parties to the intellectual quarrels of to-day are quarreling about historic materials of education, and they are doing it with many of the same arguments that were used by their prototypes of the seventeenth century. They are distinctively to be called "materialists" in education, just as those seventeenth century partisans were. A chosen subject-matter is the basis of their organization and their fight; and this is the chief defect of their position.

For they are fighting in large measure as if psychology were still in the far future, as it *was* in the seventeenth century. In a sense, this *is* the case. Psychology adequate to the illumination of most of our problems is still very much in the future. But the discussion of educational problems can now be carried on in the actual light of at least some few psychological principles. It is only too true that educational psychology has still its major tasks to accomplish; especially, must its emphasis pass over from the purely structural and experimental phase to the social and creative phase. But some of this preliminary work has been done, and it is possible to determine the standing of an educator to-day by finding out to what extent his educational discussions take into account the genuine developments of structural and social psychology. Although the foundations in psychology are not complete, there are some genuine fundamentals upon which we may stand. We shall see more of this in another section.

Now it must not be assumed that though we have returned to the community, history has brought us nothing but this rather large muddle of warring sects, this seeming confusion. True, this muddle, this confusion of parties, is better than the deadly certainty of the folkways; we have achieved this one gain anyhow. History has broken through what Browning calls the "ghastly smoothness" of life; it has "turned earth's smoothness rough." But more than this, we can here see some of the actual elements of the problem of education, whether of the community or of the individual. The folkways we have always with us, with their traditions, customs, and habits. We have the sophist, too, with his insistence upon living by impulse, immediate feelings, or half-grown opinion. And we have the propagandist, the follower of some outworn solution, who is too loyal to an old hope or to a radiant personality to allow his solution to decently die; or who, perhaps, by his blind devotion keeps alive some fragment of doctrine that will serve the world's need in some larger synthesis in some later age. History has been a series of researches, a set of world-wide experiments into the hidden reaches of human nature. Many elements that must enter into the ultimate solution of the problem of education have been discovered, and these we have as the permanent gain from history. We have many false elements, also, and not a few blind alleys which claim to be thoroughfares.

But the most important element in the whole problem still remains obscure—the element of method. Materials we have in plenty, even in confusion. But we do not know what to do with them. Educational research is now in the field of method. Psychology is the chief tool of this research; but psychology is of so many sorts that we seem to be getting only more confusion from its work. On the other hand, the problem of education is of many sorts.

The community, the individual child, the child in the group, the varied materials that have come to us out of the past—these are all involved in the psychology of the case. The task of psychology looms so large, and it is so important that we get something of a right perspective of it out of this historical review, that it seems necessary to devote a whole chapter to the discussion. Accordingly we turn to the specific statement of the present situation and the task of psychology.

CHAPTER XXXVI

THE FUNDAMENTAL EDUCATIONAL PROBLEM OF THE PRESENT

We have seen the constant tendency of the human mind to surrender all its achievements to the control of habit, custom, and tradition—the folkways of the group and the protection of fixed institutions. There is no denying this fact. Educational effort must recognize it, accept it, and make use of it. But correlative to this tendency there is another, though really a part of the same general mental movement—the tendency to turn every new discovery in the direction of *method* into some sort of educational *material,* i.e., to identify this new method with some special subject-matter and to block the doorway of escape from old materials with some new material, until it seems that the human mind must be essentially afraid of freedom and that it can only be happy when it has wrapped its powers round about with some sort of institutionalism, or buried them in some phase of materialism.

The Meaning of this Fact.—Now, while there is no denying the fact that all living tends to establish itself in the forms of habit and custom, there are two things to be noted about this fact. First, this tendency does *conserve* what is developed, at least, the mechanical aspects of the development, so that whatever intelligence is possessed by individual or community may be freed for the task of continuous production of larger values. And second, this tendency toward habit and custom does offer its own means of escape from itself. For there is involved in this tendency toward habit another fact of equal importance, viz.,

the conflict of habits. For habits, customs, traditions, folkways, and institutions are not exclusive of each other. They overlap; they compete; they mutually contradict; and they come into inevitable conflict. This is just as certain to happen as that they should exist at all. These *conflicts* offer the chance to escape. They are the crises, as we called them in an earlier section, out of which innovation arises; they stimulate inventiveness; they call out initiative. Out of these crises in tradition and custom *science* has arisen. Indeed, science has become the avowed program of this departure from custom and tradition. Science is the intellectual statement of the break from tradition and the growing results of that break as it endlessly renews itself. On the social side, democracy is the avowed program of the break from custom and tradition.

But even science tends to become materialistic and to set up completed results, classified materials, as its goal, just as democracy continually slips from its high purpose and takes refuge in traditionalisms. It would seem that if science is to escape from this materialism, it must keep to the spirit—the endless, the lastingly active search for truth. This keeping of the *spirit of the search* becomes more and more difficult as the results of the search, the materials of science, pile up, and pride of accomplishment comes in. Some scientists feel, even now, that science has come into a rather decadent condition. "The acceptance of the results of scientific work as constituting science is surely one of our grievous faults. For science is not classified knowledge,—a complete thing; but rather classification or organization of knowledge,—an active process. If, therefore, we wish to rescue science from its present decadent condition, one of the first steps seems to be the recognition of this distinction."[1] That is to say, the cure

[1] Mann: "Science in Civilization and Science in Education," "School Rev.," Vol. XIV, p. 667.

for this almost universally recognized evil is the replacing of the materialistic conception of science by the active, creative conception. In exactly the same manner our social processes tend to become consummated, to be finished. Democracy tends to become materialistic, i.e., to assume that certain historic institutions are essentially democratic, and that certain documents assure us our democracy, whether we take thought for it or not. Thus, among thoughtful people there is fear for both science and democracy. With reference to the latter, Jane Addams wrote some years ago, "The ideal of democracy,—'a people ruling,'—the very name of which the Greeks considered so beautiful, no longer stirs the blood of the American youth, and . . . real enthusiasm for self-government must be found among the groups of young immigrants who bring over with every ship a new cargo of democratic aspirations."[1] And it has been pointed out by thoughtful scholars that the very successes of science in piling up great masses of assured facts will tend toward dogmatisms.

Now the cure for these decadent tendencies in our democracy is assumed to lie in the redirection of our whole intellectual attitude toward political institutions. Criticism must take the place of docility, and reconstructive action the place of mere obedience. Eternal vigilance is not merely the price of liberty in the first place; it is a part of the fixed cost of maintaining liberty forevermore. It is to be doubted whether there is any place for *mere* obedience in a democracy since democracy is grown out of the active coöperations of all its constituent members. But American democracy has cultivated, perhaps not unnaturally, a type of unthinking obedience and acceptance not unlike that expected of the subjects of old monarchies. De Tocqueville more than sixty years ago called attention to this fac-

[1] Cf. "The Spirit of Youth and the City Streets."

tor in American life in his "Democracy in America." Professor Dewey has recently pointed out that the "American conception of freedom is fundamentally incompatible with the doctrine of duty as that has developed in" certain militaristic countries of Europe. The cure for decadent democracy must be more democracy, i.e., more intelligence in the expression of our civic life. In like fashion the cure for decadent science must be more of the spirit of science, i.e., more active and creative intelligence at work in the world of knowledge, with less of the merely imitative, the merely repetitive, and the bookish. And this means that science must cut loose from the sciences and become the instrument of all aspects of human interest.

What Does History Say of These Things?—Human nature does tend to commit all its accomplishments to the care of habit, custom, and institution. Moreover, it has been the tendency of history to identify accomplisher with accomplishment and to commit human nature itself to the care of the selfsame habit and finality of expression. Out of this has grown the doctrine that "human nature is essentially unmodifiable," since its characteristics were fixed in the long ages of primitive unintelligence. But this doctrine seems to be just the fallacy which both science and democracy seek to avoid. Science and democracy both assume that life can become intelligent; that is to say, men can really learn to live on the general level of intelligent analysis and organization of life, and they are not condemned to live forever in the control of some old structure of habit. This does not mean, of course, that life can dispense with its great understructures of habit; but it does mean that the habitual element in human life shall be *under*structure, and not the main accomplishment. Certainly, it means that it shall not be the final statement of life itself. But how is this element of habit to be made and kept *under*structure?

Does not history show that habit and institution *always* conquer innovation, invention, and initiative? What of all the protests that we have come upon? Are they not all lost in the structures of institutionalism that now stand where once the protestant raised his rebellious voice? Yes, in part; no, in great measure. Institutions have been made over, renovated, renewed, and turned to new purposes and goals.

But more than this, history simply shows how such processes have gone on in the past, and what must be avoided if the future is to take other lines of development. History does not necessarily repeat itself. In fact, in recent decades history has not been repeating itself. The Panama Canal was dug, completed, and turned to successful operation because history was kept from repeating itself,—the history of an earlier, prescientific day. The discoveries in medicine, hygiene, and sanitation are making possible a new distribution of the forces of civilization and the reclaiming of vast areas of useless earth. But this is possible in other than the material and external aspects of our living; it is possible with reference to the internal, the mental, and the social. Psychology will sometime certainly be able to do for these mental and social aspects of our living what sanitation and hygiene are doing for the external and physical. Indeed, in some presentations hygiene includes both mental and physical aspects. And just as hygiene and sanitation showed us how the mistakes of the old days at Panama could be avoided, so psychology will tend to show us how the old mistakes in education can be avoided. But just as the task of the sanitary expert was a lasting one, or will be a lasting one, as long as work goes on in regions where disease is possible, so the task of the psychological expert will be a lasting one as long as education goes on where ignorance and mere habit are possible. The old disease-factors

and conditions stood out before the Americans at Panama when they went there to work; but the great aim—an Isthmian waterway—also stood out before them. Hygiene and sanitation cleared away one and made the other possible; or, at any rate, these showed the relationships between the two. In education to-day the old habit and institutional-conditions stand out before us as seemingly impossible obstructions; but the great aim of democracy—an intelligent people ruling themselves and organizing a really human life for every member of the national life—also stands out before us. Psychology must do for us here what hygiene and sanitation did for us at Panama. Psychology must show us the relationships between this old world of habit,—the folkways of our history,—and this larger world of intelligence,—the protests of our history and the science of our own times. Let us see more definitely just what that problem is.

The Problem of Education.—Habit is the essential mechanism of our living, and to habit all *recurrent* activities are committed, so that intelligence may be freed for other new and more important tasks. Habit does not exist for the sake of controlling the intelligence, nor to supplant the intelligence, but wholly to do the mechanical work of life, so that the intelligence may be free. But on the other hand, psychology is telling us that the intelligence is not a *structure* of the mind which will continue to exist unused. This complicates the problem. The intelligence seems to be a *function* of the mind which appears in times of crisis to help in the readjustment that the crisis demands; intelligence seems to be a valuable instrument for certain functional aspects of experience. When any particular process of adjustment is completed, the whole matter is turned over to habit for its more effective control. Intelligence retires from the scene. If this new adjustment has been devel-

oped out of an important phase of experience, it may contribute to science. New tools may be invented, new knowledges uncovered and organized, and science may be thus enriched. But when the intelligence retires from the scene, turning full control of the new mechanisms over to habit, the spirit of science also retires, leaving behind only some new knowledge which will probably in course of time become *material* for some curriculum. Now if this adjustment has had to do with actual social and civic concerns, the moment of reconstruction has probably involved a genuinely scientific consideration of social factors in which all old institutional prejudices have slipped away and social relationships have stood forth in something like naked reality. At such a time the spirit of democracy is present; and if such an attitude of inquiry into social problems could be maintained, democracy would probably be the ultimate outcome. But when intelligence retires from the scene, science, the spirit of inquiry, retires also, and with these goes democracy, the hope of a natural, human life. In its place there is left only some new bit of social mechanism which is not unlikely to become in good time a further obstacle to the real establishment of democracy. There *are* individuals who have been *scientists* all their lives; that is to say, they have kept alive the spirit of inquiry. Their spirit has known the religious quality expressed by a writer of old: "I count not myself yet to have attained: but one thing I do, forgetting the things which are behind, and stretching forward to the things which are before, I press on toward the goal." But this outcome was possible because life had come to be a problem in itself. That is to say, life was not merely made up of problems big and little; life was itself a continuous problem demanding continuous thoughtfulness. May it not be said that the one hope of making an intelligent life on earth, a life whose social order shall

be democracy and whose intellectual nature shall be science, depends upon so using our educational agencies that instead of making education an *answer,* or a series of *answers,* to problems, we should make it the means of pressing home upon all people the sense of life's problems? This will mean that the whole great complex of habit, custom, institution, organization, and stimulation which surrounds us shall come to us as a real *world-problem* (which it is to serious minds) of such lasting complications and uncertainties as to impose upon all our experiences the lasting problematic quality which is necessary to the production of thought; and out of this it will come to pass that the adaptive aspect of experience and the inventive function of thinking will be continuously in evidence, and hence over all of life will linger the fine glow of lasting, intelligent consideration. This is, when warmed to its task, science!

But is this the problem of education? This must be the result that our educational processes seek to secure, if we are to make sure of our democracy and our science. But this is a result that can never be secured by any program of education that bases itself upon *materials* of any sort whatsoever. Science cannot secure the scientific attitude by feeding up youthful minds on the achieved results of science, i.e., classified knowledge. Democracy can find no more effective way of destroying the active intelligence that is promised in the normal child, and that is essential to the continuity of genuine self-government, than by insisting that the prime material of civic education is civics of the bookish sort. This is not a quibble; it is the statement of a tragic fact. It is the fundamental problem of education in a democracy; and its solution lies in the psychology of the intellectual processes as those processes appear in the active experiences of life. The problem of learning is very much less important, since it is a much later item in a nor-

mal mental life. The stupid, tragic fact is that all too often the problem of intelligence is identified with the problem of learning; hence the problem of intelligence remains obscured and unsolved, and the deadly process of cramming takes the place of a real process of education, while the teacher abdicates his function and becomes a mere purveyor of *materials.*

Relations of this Problem to the History of Education. —We have seen the significance of these facts all through the long story of the world's education. The innovations, i.e., the reforms, in the history of education are almost pathetically numerous; and the educational parties of today seem to represent all these innovations of the past, keeping them alive and clamorous as particular schemes. For the fact is that practically all past innovations, though they may have begun with the intention of working intelligently, i.e., of attacking the *problem* of education, soon found themselves involved in the defense of some particular *material;* that is to say, they soon reached a *finality,* a solution, and in self-defense were compelled to stand by it. This means, of course, that for them the problem no longer existed, since they had found the solution. But it means much more. It means that their own intelligence had retired from the field, since, as we have seen, intelligence retires when the problem is solved. Thus another brave effort fails, and the world once more sinks to the level of custom and habit. One of the most obvious illustrations of this tendency is seen in the gradual degradation of humanism into Ciceronianism. But practically all other *materials* have suffered the same fate. Even the psychological doctrines, which promised to open the way for the creative activities of mind, have not escaped. Pestalozzi, Herbart, and Froebel—each and all became lost in the elaboration of certain materials which particularly illus-

trated the application of their particular doctrines. So psychology, which should have been working out the conditions under which mind functions freely and creatively, becomes lost under the accretions of habit and surrenders to the demands of a fixed material. Not infrequently it accepts the position of chief defender of the doctrines of the materialists by showing how adequately the chosen materials serve the needs of mental development.

To be sure, external pressures are sometimes brought to bear to secure these results. For example, Froebel's earlier efforts to foster self-activity in the children of his kindergarten were all too obviously democratic and were prophetic of possible disaster to existent institutions in autocratic Germany; therefore the heavy hand of government soon put an end to all such nonsense. At other times the church has been overzealous in the same direction. At present conservative political forces in America seem to feel the dangers that lurk in an education that is too intelligent. Hence, for example, these forces are working for the establishment of a type of industrial education that shall head off and prevent the establishment of a thorough system of vocational education which should include all the educational agencies now at work. The great problems of statesmanship in the future will largely revolve around the nature of our public education and its control. That is now clearly seen in England and it will soon be seen here. The fate of democracy is involved in the direction which our education takes.

The Task of Psychology.—The clue to the educational problem of the present lies in psychology. To be sure, materials must be considered, and any educational process will involve materials; but the question of materials is not the dominant one, nor the important one. The problem is not even that which was stated by Pestalozzi as the "psy-

chologizing of the materials of education." From another point of view the structure of social order seems the most important aspect of education, and this is an important result to be worked for. Herbart thought this "becoming gradually conscious of the moral order of the world" was the real goal of the process. But he conceived this moral order as being already in existence in a Platonic sense; hence his psychology has become formal and lifeless.

Education involves the conception of an active process of creating experience and developing selfhood in each individual member of the community. In this process the particular child is to be regarded not as the *object* of the process, as being worked upon by teachers, but as the *subject* of the process, as gradually coming to "power on his own life and on the world." Democracy, as a social order, knows no fixed goals; the tasks of democracy stretch before us endlessly. Science, as the method of the intellectual life, knows no final limits. The universe seems infinite, and the reaches of man's experience are beyond present comprehension. Education in a democracy must conceive itself as the process by which the immature members of the community become ready to live in this democratic and scientific universe, where freedom from old superstitions is being assured. They must be made ready to live socially, morally, creatively, constructively, and responsibly. Such an education differs from the education with which we began this study as democracy differs from autocracy. Such an education must be true to the ideal—democracy; and it must use the means—science. And science here means psychology as the constant interpreter and guide, over and above all *materials* of whatsoever sort.

Democracy sets forth an ideal of a social order in which there shall be no purely artificial barriers to the contacts of its members; in which there shall be broadest toleration

and continuous attention to the possibilities of coöperative neighborliness and public-spirited citizenship. To be sure, many persons of the present social order, who have been trained in old, exclusive atmospheres and who find the ideal of democracy disturbing, will not welcome the extension of that ideal to the full region of education; but on the whole, the world seems determined to achieve such an aim, if only for experimental purposes. Now the question becomes: "Is this democratic ideal tenable from the standpoint of psychology? Does psychology hold out any hope of its possible realization?" The answer must be "No," if the older psychology, which underlay older social orders, be still accepted. Old aristocratic and autocratic political systems were based on an implicit psychology which asserted that human beings (with the exception of those belonging to the ruling classes) were *passive* in their virtues, but *active* in their viciousness; hence order must be imposed from above, the world must be carefully policed, and education must not go too far, lest vicious traits become intelligently vicious. Old economic doctrines were based on the same general psychology. It was held that man is naturally lazy and that he will work only when he is in danger of starvation. On such foundations, of course, the effort to build a democracy would be absurdly futile.

But all such foundations have been discredited by the psychology that has grown out of the doctrines of evolution. Man is just as active by nature as the rest of the universe; children are overflowing with activities. The task of education or of politics or of industry is not to get the individual to act, but rather to help him organize these overflow activities with which he begins life so that he may act wisely and well. This is the doctrine of psychology to-day. It transforms the whole face of education, and it makes possible an educational program which can take

democracy as its goal and can use science as its means. Its goal is a society in which men are actively at work constructing a good life for all, and making sure that all have a chance to share that good life; its intelligence is kept actively alive by being engaged at the task of working out the endlessly changing conditions under which that good life for men becomes possible. But this psychology is the outgrowth of the evolutionary doctrine that action and experience precede thinking; that adjusting reactions are the basic factors in experience; and that thinking comes in at later, complicated levels to perform adjustments not possible to the mere mechanisms of simpler behavior. Thinking thus becomes real in the solution of actual problems; in the working out of worthy aims and goals; and in the determinate organization of the processes of experience as deliberate means for the realization of those selected goals. Thinking is not imposed upon experience, as Plato taught, and as the school and other preexistent institutions have echoed ever since. Thinking is the instrument of experience in its efforts to make a world of order and value. Thinking is science,—the spirit of science, the tool of science. But thinking is not life; it is the tool of life.

Now there *is* such a psychology. It is active, rather than passive. It is voluntaristic, rather than intellectualistic. It is expressive, rather than primarily receptive. It is vital, rather than academic. It is found in men, rather than in books. It is social, rather than individualistic. It has to do with accomplishment and with activity, rather than with mere learning, but it makes learning an aid to accomplishment. It may come out of laboratories, but if so, it is only because it first went into the laboratories out of the world of action. It tells of the processes of real experience; it works out real motives; it deals with the

urges of actual impulses; it takes into account real desires; it tells how we lay up real stores of living experiences, including knowledge, how we develop the powers of reflective thinking (if we do), and how out of all these aspects of experience the growing fact of personal selfhood gradually appears, molding all experiences into experience, and giving to life something of unity and integrity.

Such a psychology is scarcely a science in its own right. It is probably, rather, a sort of handmaiden to all the sciences, including that practical science called the science of teaching. Such a psychology is especially the servant of the democratic ideal; not, indeed, a slavish servant accepting all the wild and weird desires of uncritical democratic aspirations as final truth, but that helpful servant who lends her own technical knowledge for the criticism of the excessive and exaggerated modes of her master. Education for democracy depends upon the development of this more social and creative type of psychology, and also upon its use in analyzing the actual relationships of the child to the adult world and in stating the processes of their interaction.

Such a psychology will be able to tear to pieces the assumptions of the folkway attitude, or of any other static conservatism. It will penetrate the dogmatisms of the old educational theories that always ended in some form of materialism, and it will tend to bring to an end the materialistic partisanships and clamorings of the half-intelligent movements which we have noted in the last chapter. Out of this psychology will come a theory of education fitted to the expanding conceptions of our democratic life, a theory that will make education as thoroughly social, moral, practical, and vital as it was in the folkway community, while at the same time making it as intelligent as modern democracy and science demand and promise that it shall be.

CHAPTER XXXVII

THE PRESENT AS A PART OF HISTORY

With such a general historical survey and summary completed, we must take one last glance as we "swing out into the present." From such a survey we come into a present that is neither complete nor self-satisfied. We have heard the clamors of warring sects and parties; we have seen the evidences of work still to be done, "the little done, the undone vast." History is not ended, for all these varied movements seem to be alive and to be struggling more or less intelligently, more or less bitterly, for their proper recognition. We have, as we may say, "ransacked the ages"; and we bring back some worthy gains, though perhaps not all that the hopes of the past, the aspirations of the ages, have promised. Some goals have proved illusory, some hopes fallacious, and some purposes too difficult. It is not unlikely that we shall be compelled, soon or late, to recover through long and arduous effort whatever of real value we have lost along the way.

What Have We Gained?—We may here enumerate only a few of the major gains. First, may we not say that we have gained the sense of the dramatic quality of history, that quality which makes fact stranger than fiction? Fact is stranger and more interesting than fiction when it is seen in its proper, natural, dramatic setting in the play of human hopes and purposes. Individuals, groups, nations, institutions, ideas, and systems of thinking—all these have played for a place in the world's life, and human destinies have turned on their failure or success. Men have put

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their hearts into history, into the making or marring of the human story, into the control of destiny. In the earliest ages such control was sought through magical means, through prayer, or other religious forms; and always force has been used as a means of control. In the modern period the effort has been to use intelligence. The plot and the actors have changed, but human interest is at the heart of both plot and acting. The race has worked hard in its efforts to understand this seeming drift of experience, and hopes have run high or fallen low. Men have done gallant deeds, shameful deeds, and colorless deeds during the long ages of repression. Men have risen to sublime heights of unselfish sacrifice and service, or have fallen to the lowest depths of disgrace. This has occurred in real history, not merely in the pages of romance. Socrates and Jesus are real characters in history, and though much of myth has gathered around each of them, especially the latter, yet the world cannot be too often reminded that both and each of them once lived. But "Attila the Hun" was a real character, too, and Catherine di Medici. History has swung between these great extremes, and out of it has come the deeper understanding of our common humanity.

Second, we have caught some glimpses of some of the great factors that have helped to produce this dramatic quality. We have seen the habitual, the customary, the traditional aspects of human nature in full control of all the conditions of life in the primitive world; we have seen the numerous protests against this folkway organization; we have seen this stationary attitude ally itself with all the economic, political, social, religious, and intellectual elements existent (at least above the surface); and working with these we have seen it come to full conscious understanding of itself in the magnificent structure of civiliza-

tion that filled the world and the imaginations of men at the height of the Middle Ages. Over against all this we have seen the deeper impulses and energies of life and growth groping to expression in the full thoughts of Socrates, the human hopes of Jesus, the fresh blood and youthful mind of the Teutonic barbarians, and the almost innumerable revolts of the modern world, until these find some more adequate organization in the general doctrine of social evolution in the nineteenth century. History has been the long struggle between these two tendencies in human nature—between habit, custom, and tradition on the one hand, and impulse, growth, change, and reconstruction on the other. Men have lived through every variant difference between these extremes. *History* that passes by these vivid contrasts, and the forces, passions, energies, and hopes that made and make them real, leaving us but the cold world of fact, is not real history, but only sterile scholarship gone wrong through fear of life.

In the third place, we may have gained some glimpse of the relationships of means to ends in human history. We have come upon many aims; history has been a long, long tragedy of *ends unrealized,* doubtless, in part unrealizable. Why is this true? Mainly because men have very slowly learned that aims do not get themselves enacted into reality merely through their own intrinsic values, or through the pious hopes of their advocates. The evolutionary doctrine has elaborated the general concept of mechanism as the clue to the understanding and control of the world of nature. That conception seems at first glance to be particularly hostile to ideals. But it is rather the real hope of the attainment of our human ideals, for it has taught us that our ideals and aims are not just the happy accidents of history, or the results of pious hopes; they are rather the actualization of men's programs, and these programs can be

worked out, because the world can be depended upon. Nature, for the purposes of human life and for the realization of ideals, can be stated in terms of dependable mechanism. Nature is not erratic. At least, dependable mechanisms can be found in nature; and these can be used for the accomplishment of ends desired, at least in so far as our desired ends can be stated in terms of these mechanical possibilities. Thus our aims can be actually assured. This is the significance of science—nature becomes orderly and humanity learns how to work through nature to the accomplishment of some desired purpose. This is a long, slow task, but little by little, as we learn how to state the more and more complicated mechanisms of the world, we learn how to control the conditions of living so as to make possible a life nearer to our hearts' desires. But out of this, and more than this, we have learned that ideals and aims do not realize themselves or come true *ad hoc*. Every ideal must establish its appropriate mechanism. If we want to reach a new ideal, we must develop a new mechanism. This we have not fully learned as yet. Accordingly, we have been going on in the old ways, attempting to *organize an education for democracy* by using the *educational mechanisms of a predemocratic*, and even an anti-democratic, *type of social order*. History has been such a tragic story of defeated ends and aims because men have thought that ideals were largely self-realizing. But if ideals were self-realizing, they would also be self-eliminating. It may be that the task of realizing a purpose is long and difficult; but if we have built into its being the structure of an adequate mechanism, we shall be sure of its enduring quality. Every aim or ideal that is realizable at all must have its appropriate *means* of realization, and the tragedy of the past will become the folly of the present if we do not learn how to make our gains secure by giving to

our ideals and aims the permanence of the world itself in terms of effective mechanisms.

But on the other hand, as we have seen in the folkways and all through our story, mechanism, in the form of habit or custom, is the most fatal of diseases if it goes too far or gets out of control. Science must keep ahead of its own mechanisms; intelligence must lead. The developed and developing machinery of the world must be kept at work in the beneficent service of humanity, and it must be kept flexible enough to yield to the continuous demands for reconstruction. It is the old story. Life cannot get ahead without building up these mechanisms of habit; and it cannot get ahead if it builds them up too securely.

The Present and the Past.—Looking back over the ways we have come, we seem to see little but problems, unless it be unsuccessful solutions of those problems. From such an enterprise we seem to have come back with nothing definite and permanent. But that is a mistaken view, as has been pointed out in a preceding paragraph. In addition to all this there is one further consideration: we are trying to live in a democratic fashion, and in a democracy there are very few problems that have a final statement. Democracy is itself a permanent problem; hence most of the problems that appear will be permanent problems whose solutions will change from age to age. In a democratic social order, wherein science is seeking to become the method of living and of control, a *final answer* is not the ideal goal. Problems become more and more complicated. Their roots are in the folkways of the past and in our own habitual living, their stems are set in the deep and variant soils of history, and their branches reach out beyond the vision of the present into the distant future. History digs up many problems, and settles few or none. Certainly, the history of education settles few or none. The task of solving

problems runs over into other phases of educational study, as we have seen, and into which it is not our province here to enter. But that which history demonstrates conclusively—that psychology must furnish the clue to the determination of our educational problems—may not be lightly avoided. It is the application of the most complete developments of psychology to the interpretation of the educational task. What history contributes in the way of problems, psychology must analyze and determine.

One item more in this connection. Democracy can have no hope of ever escaping from the stress of problems. Or perhaps we should say that if democracy ever does so escape and lose the sense of facing problems, then intelligence will disappear, science will decay, and democracy will die. The very possibility of democracy turns upon the permanency of the problematic element in human living. Intelligence functions only in the presence of some problematic situation. Now we have seen in the course of this story how we have been swept far out from the certainties of the old folkways, with their unconsciousness of the forces, interests, and energies of life, into the uncertainties of the present, with its endless problems, its science, and its profound hopes of democracy. The problems of the past were in keeping the world secure, and of rendering it free from pain and problems. The great problem of the present is in keeping alive the realization of the fact that we live in a world of unstable equilibrium, in a world of problems, and that the way to meet problems is to recognize their existence, not to ignore them in the interest of a fancied security. Problems make democracy possible, since out of the existence of problems comes the larger intelligence which is able to deal with life in a democratic way. It is not fewer but more problems that we must have. The social and educational ideal of the past stated itself in

terms of a final adjustment to a peaceful environment. The educational ideal of to-day is doing its best to recognize the continual complication of issues and practices in a democracy, and hence it attempts to state itself in terms not of ultimate finality of adjustment, but of that capacity for adjustment, that plastic adaptability, which will make possible the continuous reorganization of society and social institutions whatever may happen in the social order.

One Final Problem.—Taking leave of all these factors and the gains that we have gathered, we must note one final fact. Education is a social process, and it has been such in every progressive period. But during periods of stagnation old practices cling and become formalized, until, as we have seen, at times education seems entirely cut off from connection with the vital currents of life. It becomes more and more remote from actual motives, more and more purely intellectual. This intellectual element has some excuse for existence, of course. In a complicated society where few children can have actual access to the realities of experience, either with physical objects and processes or with social factors, education must content itself with becoming a *description of experience*, instead of being experience itself. The hope is that this description of experience, taken from books for the most part, may help the childish mind to grow and live as if the experience had been real. In other words, in our complicated modern social conditions a conceptual statement of experience must take the place of a perceptual participation in real living. So it would seem, at any rate. But of course this substitution has its dangers. It becomes more and more intellectual, wordy, remote, "bookish," academic, unreal. A world of books,—a sort of Platonic world of preëxistent ideas,—is set over against the world of actual experiences, and it becomes a sort of second-hand "academic" environ-

ment, which competes with the real world and the common social environment; so that, as Bergson says, the schools, doing their work in this second, rather unreal, environment of the books, tend not to nourish the real life of the child, but to build up upon that real life a second sort of mental structure,—which he calls a "parasite soul." The cure for this would seem to be the actual substitution of the "conversation of concrete individuals for the pale abstractions of thought." How is this to be accomplished?

Now, we have seen that all through history men have been asking for a more comprehensive treatment of human nature; and they have been trying to answer their own demand by setting forth from age to age whatever has been found of significance. Occasionally, these fragmentary demands and contributions find a comprehensive organization in reconstructive theory,—and a new age is ushered in. This happened in the field of general science with the presentation of the Darwinian doctrines. There is some evidence that we are on the eve of such a largely reconstructive outlook in the field of education at the present time. At any rate, we seem to be on the edge of a great and, as yet, largely unknown land: some few explorers have gone into this land, and they report possibilities. The great war is making demands that can be answered only as we learn a new procedure in education; no, not an entirely new procedure; rather, as we complete the procedure that we have come upon here and there, in the course of this survey,—the procedure that is called democratic. "Experimental Schools" have been working in this direction for two decades. The "Dewey Experiment" in Chicago and, more recently, the "Gary system" represent advance work, and hopeful progress. The task of education becomes, in England, the most important concern of statesmanship. The existence of that task is clear: but how shall it be accom-

plished? Theories, in plenty, have come down to us, and with us, out of history; criticisms of the traditional and the contemporary activities in education are continuous; in the deep undercurrents of public opinion hopes of a more intelligent social order may be found: what seems lacking,—as a final clue? Is it not *theory?* Do we not need a large and comprehensive Theory of Education, that will bring into order and make ready for use all these confused masses of particular theory, old materials and common practice, whose endless details we have come upon in history, and whose more or less glaring outcomes we see all about us: a Theory of Education that will accomplish for this confused world of educational hope and effort what the Theory of Evolution did for the confused world of biological speculation and observation in the middle of the nineteenth century? A theory that will tend to bring order out of confusion, intelligence out of chaos, and control out of these warring traditional and accidental conditions?

For such a Theory of Education the materials have been slowly gathering; some of the preliminary work has been done, as we have seen; but not all. The background has not yet been fully cleared; the theory of evolution has not been thoroughly applied to the general problem of educational restatement; science has not yet consented to devote its energies unreservedly to the task of human development, though its consent is not distant. The content of culture has not yet been freed from its old taint of predemocratic "humanism," which set the "liber" over against the "servus." Platonic exaltation of reason, that grows out of experience, above the experience that produces it is still educational "good form." Conceptions of "human nature" which justify on grounds of "native endowment" gross abuses of "human nature" which are based wholly in survivals dating from remote autocratic pasts are still re-

vered. One psychology for the "cultured" and another for the "proletariat" is still the rule. We do not yet *see* education *comprehensively* as it was *enacted comprehensively* in the primitive folkways: the mediation of the *content* and the *spirit* of the life of the group to the growing members of the future group. Such a *seeing,*—such a *theory,*—will set forth the educational problem of to-day as a *community* problem in the old sense; but the *content* of modern life is a moving content; and the *spirit* of the modern community is a changing element. The theory that we need will hold science and democracy as its central terms; and it will define science as the living spirit of inquiry reverently working in the service of the good life; and it will define democracy as that only sort of social organization in which science can find itself permanently at home.

And so we see that the history of education is not ended. In a sense, as a really conscious process it is only largely beginning. Its largest task, to date (unless it was the task accomplished by Socrates) lies just ahead of us. Here, as almost nowhere else, there is need of students. Here there is chance for constructive scholarship. The permanent, and therefore continuously changing, task of a democratic civilization will be to assure itself that its intrinsic aims and purposes are not being defeated by the failures of its educational processes to measure up to the high necessities of the age. Democracy, the very antithesis of the folkway spirit, is assured only in the assurance of a democratic educational process. If this is secured, all is secure; if this is defeated in the schools, all is defeated. The schools are either the hope of democracy or they are the defeat of democracy. Which they shall be remains for us to help determine; and for some future history of educational developments to record.

APPENDIX

BIBLIOGRAPHICAL SUGGESTIONS

This brief bibliography is offered as the basis of further work in this field. For the student of the history of education, acquaintance with the standard works on that subject is desirable. Those are, in brief:

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Monroe, "Text-Book in the History of Education." New York, 1905.

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Davidson, "A History of Education." New York (Scribners), 1907.

But the anthropological point of view was not yet clearly established when Davidson wrote, so that his book does not do full justice to the problem of origins; and it compresses the psychological discussions of the modern period into a few brief chapters.

A complete bibliography of the history of education from the standpoint of the present volume would contain very wide selections from all the fields of human interest. There are offered here only a selected few of the many books which have helped to form the theory of interpretation and to give the foundations of fact underlying this presentation. It was desirable to make this list brief, because overextended lists of readings are discouraging. Hence, in most cases but two references are given. One of these is (more or less definitely) historical and, if possible, contemporary material; the other is critical. The divisional numbers in the list correspond to chapters of the book.

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